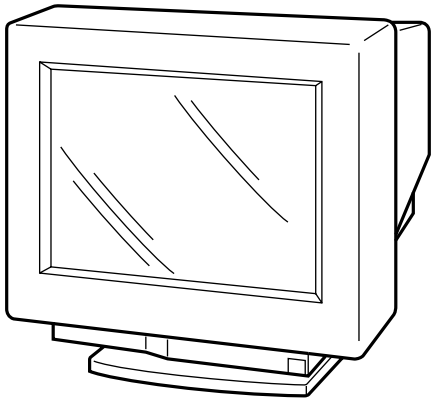
GDM-500PS/500PST/500PST9

SERVICE MANUAL

REVISED



GDM-500PS

US Model

Canadian Model

S. Hemisphere Model

Equator Model

Chassis No. SCC-L04E-A

GDM-500PST/GDM-500PST9

AEP Model

Chassis No. SCC-L04B-A

N3 CHASSIS

SPECIFICATIONS

Picture tube	0.25 – 0.27 mm aperture grille pitch 21 inches measured diagonally 90-degree deflection
Viewable image size	Approx. 403.8 × 302.2 mm (w/h) (16 × 12 inches) 19.8" viewing image
Resolution	Horizontal: Max. 1600 dots Vertical: Max. 1200 lines
Standard image area	Approx. 388 × 291 mm (w/h) (15 3/8 × 11 1/2 inches) or Approx. 364 × 291 mm (w/h) (14 3/8 × 11 1/2 inches)
Deflection frequency	Horizontal: 30 to 107 kHz Vertical: 48 to 160 Hz
AC input voltage/current	100 to 240 V, 50 – 60 Hz, 2.0 – 1.0 A
Power consumption	Max. 160 W
Dimensions	498 × 505 × 474 mm (w/h/d) (19 5/8 × 20 × 18 3/4 inches)
Mass	Approx. 31 kg (68 lb 5 oz)
Supplied accessories	See page 6

Design and specifications are subject to change without notice.

TRINITRON® COLOR GRAPHIC DISPLAY

MICROFILM

SONY®

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

1. Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are "pinched" or contact high-wattage resistors.
3. Check that all control knobs, shields, covers, ground straps, and mounting hardware have been replaced. Be absolutely certain that you have replaced all the insulators.
4. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
5. Look for parts which, though functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
6. Check the line cords for cracks and abrasion. Recommend the replacement of any such line cord to the customer.
7. Check the B+ and HV to see if they are specified values. Make sure your instruments are accurate; be suspicious of your HV meter if sets always have low HV.
8. Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC Leakage. Check leakage as described below.

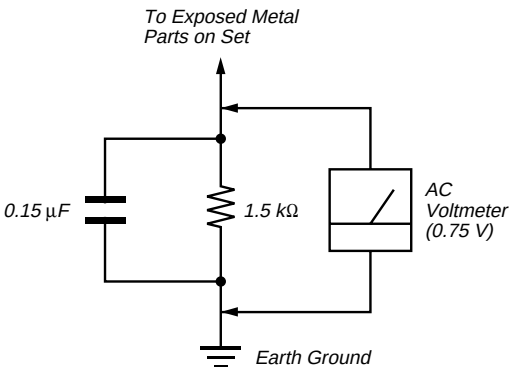
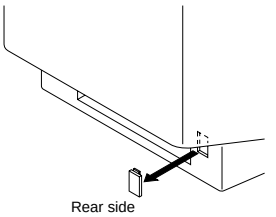


Fig. A. Using an AC voltmeter to check AC leakage.

CAUTION ON DAS (ECS) CONNECTOR

- The connector for DAS (ECS) adjustment is provided inside the cover shown below. Be careful with an electrical shock when connecting the connector with the power supplied. Also, return the removed cover to the home position.



LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes).

Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOMs that are suitable. Nearly all battery operated digital multimeters that have a 2 V AC range are suitable. (See Fig. A)

WARNING!!
NEVER TURN ON THE POWER IN A CONDITION IN WHICH THE DEGAUSS COIL HAS BEEN REMOVED.

SAFETY-RELATED COMPONENT WARNING!!
COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL FOR SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL FOR SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

AVERTISSEMENT!!
NE JAMAIS METTRE SOUS TENSION QUAND LA BOBINE DE DEMAGNETISATION EST ENLEVÉE.

ATTENTION AUX COMPOSANTS RELATIFS À LA SÉCURITÉ!!
LES COMPOSANTS IDENTIFIÉS PAR UNE TRAME ET UNE MARQUE ⚠ SONT CRITIQUES POUR LA SÉCURITÉ. NE LES REMPLACER QUE PAR UNE PIÈCE PORTANT LE NUMÉRO SPECIFIÉ. LES RÉGLAGES DE CIRCUIT DONT L'IMPORTANCE EST CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT SONT IDENTIFIÉS DANS LE PRÉSENT MANUEL. SUIVRE CES PROCÉDURES LORS DE CHAQUE REMPLACEMENT DE COMPOSANTS CRITIQUES, OU LORSQU'UN MAUVAIS FONCTIONNEMENT EST SUSPECTÉ.

POWER SAVING FUNCTION

This monitor meets the power-saving guidelines set by VESA and Energy Star, as well as the more stringent NUTEK .
If the monitor is connected to a computer or video graphics board that is VESA DPMS (Display Power Management Signaling) compliant, the monitor will automatically reduce power consumption in three stages as shown below.
You can set the delay time before the monitor enters the power saving mode using the OSD. Set the time according to "Setting the power saving delay time" on page 1-6.

Note

If no video signal is input to the monitor, the "NO INPUT SIGNAL" message (page 1-8) appears. After the delay time has passed, the power saving function automatically puts the monitor into the active-off mode and the u indicator lights up orange. Once the horizontal and vertical sync signals are detected, the monitor automatically resumes its normal operation mode.

	Power consumption mode	Screen	Horizontal sync signal	Vertical sync signal	Power consumption	Recovery time	⏻ indicator
1	Normal operation	active	present	present	≤ 160 W	—	Green
2	Standby (1st mode)	blank	absent	present	≤ 100 W	Approx. 3 sec.	Green and orange alternate
3	Suspend (2nd mode)	blank	present	absent	≤ 15 W	Approx. 3 sec.	Green and orange alternate
4	Active-off (3rd mode)	blank	absent	absent	≤ 5 W	Approx. 10 sec.	Orange
5	Power-off	—	—	—	0 W	—	Off

DIAGNOSIS

Failre	Power LED
+B failure	Orange → Off (0.5 sec) (0.5 sec)
Horizontal / Vertical Deflection failure, Thermal protector	Orange → Off (1.5 sec) (0.5 sec)
ABL protector	Orange → Off (0.5 sec) (1.5 sec)
HV failure	Orange → Off → Orange → Off (0.25 sec) (0.5 sec) (0.25 sec) (1.25 sec)
Aging / Self Test	Orange → Off → Green → Off (0.5 sec) (0.5 sec) (0.5 sec) (0.5 sec)

Aging Mode (Video Aging) : During Power Save, press "MENU" key for longer than 2 second.
Self Test (OSD Color Bar) : During Power Save, press "CONTRAST" + (➡) key for longer than 2 second.
Reliability Check Mode : During Power Save, press "CONTRAST" – (⬅) key for longer than 2 second.

TIMING SPECIFICATION

MODE AT PRODUCTION	MODE 1	MODE 2
RESOLUTION	738 X 414	1600 X 1200
CLOCK	28.322 MHz	229.500 MHz
— HORIZONTAL —		
H-FREQ	31.469 kHz	106.250 kHz
	usec	usec
H. TOTAL	31.777	9.412
H. BLK	5.720	2.440
H. FP	0.318	0.279
H. SYNC	3.813	0.837
H. BP	1.589	1.325
H. ACTIV	26.057	6.972
— VERTICAL —		
V. FREQ(HZ)	70.087 Hz	85.000 Hz
	lines	lines
V. TOTAL	449	1250
V. BLK	35	50
V. FP	5	1
V. SYNC	2	3
V. BP	28	46
V. ACTIV	414	1200
— SYNC —		
INT(G)	NO	NO
EXT(H/V)/POLARITY	YES N/P	YES P/P
EXT(CS)/POLARITY	NO	NO
INT/NON INT	NON INT	NON INT

97.9.10 VER.

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Note: Hand degauss must be used on stand-by or power-off condition.
This model has an automatic earth magnetism correction function by using an earth magnetism sensor and a LCC coil. When using a hand degauss while monitor (LCC coil) is being operated, it sometimes gets magnetized, and the system may not work properly as a result.

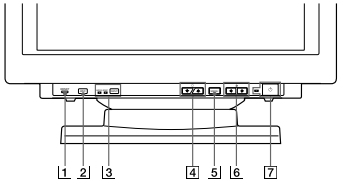
The operating instructions mentioned here are partial abstracts from the Operating Instruction Manual. The page numbers of the Operating Instruction Manual remain as in the manual.

SECTION 1
GENERAL

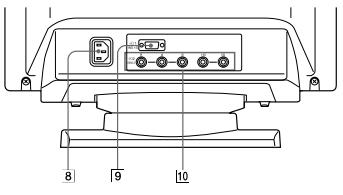
Identifying Parts and Controls

See the pages in parentheses for further details.

Front



Rear



1 RESET (reset) button (page 17)
Resets the adjustments to the factory settings.

2 ASC (auto sizing and centering) button (page 7)
Automatically adjusts the size and centering of the images.

3 INPUT (input) button and HD15/BNC indicators (page 8)
Selects the HD15 or 5BNC video input signal. Each time you press this button, the input signal and corresponding indicator alternate.

4 ☼ (brightness) (🡓/🡑) buttons (pages 8 – 17)
Adjust the picture brightness.

Function as the (🡓/🡑) buttons when adjusting other items.

5 MENU (menu) button (pages 8 -17)
Displays the MENU OSD.

6 ◑ (contrast) (🡐/🡒) buttons (pages 8 – 17, 22)
Adjust the contrast.

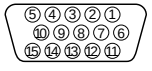
Function as the (🡐/🡒) buttons when adjusting other items.

7 ⏻ (power) switch and indicator (pages 19, 22)
Turns the monitor on or off.
The indicator lights up in green when the monitor is turned on, and lights up in orange when the monitor is in power saving mode.

8 AC IN connector
Provides AC power to the monitor.

9 Video input 1 connector (HD15)
Inputs RGB video signals (0.714 Vp-p, positive) and SYNC signals.

EN



Pin No.	Signal	Pin No.	Signal
1	Red	8	Blue Ground
2	Green (Composite Sync on Green)	9	DDC + 5V*
		10	Ground
		11	ID (Ground)
3	Blue	12	Bi-Directional Data (SDA)*
4	ID (Ground)		
5	DDC Ground*	13	H. Sync
6	Red Ground	14	V. Sync
7	Green Ground	15	Data Clock(SCL)*

* Display Data Channel (DDC) Standard of VESA

10 Video input 2 connector (5 BNC)
Inputs RGB video signals (0.714 Vp-p, positive) and SYNC signals.

Setup

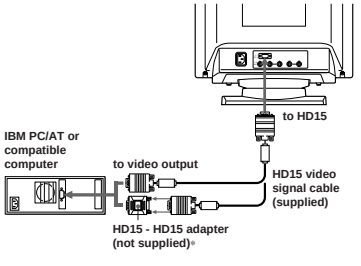
Before using this monitor, check that the following items are included in your carton:
- Monitor (1)
- Power cord (1)
- HD15 video signal cable (1)
- Macintosh adapter (1)
- Windows® 95 Monitor Information Disk/File (1)
- TCO'95 Eco-document (1)
- Warranty card (1)
- These operating instructions (1)

This monitor works with any IBM or compatible system equipped with VGA or greater graphics capability. Although this monitor works with other platforms running at horizontal frequencies between 30 and 107 kHz, including Macintosh and Power Macintosh systems, a cable adapter is required. Please consult your dealer for advice on which adapter is suitable for your needs.

Step 1: Connect the monitor to the computer

With the computer switched off, connect the video signal cable to the monitor using the supplied HD15 video signal cable.
- If you are using an IBM PC/AT or compatible computer, refer to the section below.
- If you are using a Macintosh or compatible computer, refer to the following section, "Connecting to a Macintosh or compatible computer."
- If you want to use the 5 BNC connectors, refer to the section, "Connecting to the 5 BNC connectors."

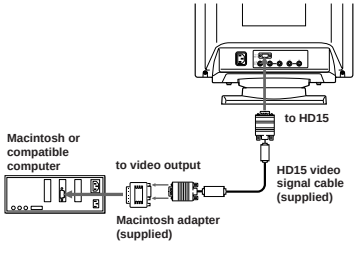
Connecting to an IBM PC/AT or compatible computer


to HD15
IBM PC/AT or compatible computer
to video output
HD15 video signal cable (supplied)
HD15 - HD15 adapter (not supplied)*

* The HD15 - HD15 adapter may be needed for some models.

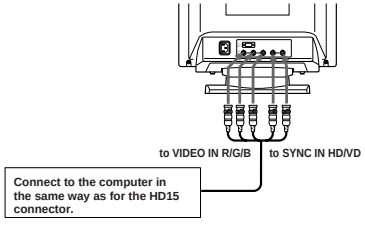
If your PC system is not compatible with DDC2AB and DDC2B+
This monitor uses the No. 9 pin in the video signal connector for DDC2AB and DDC2B+ compatibility.
Some PC systems which are not compatible with either DDC2AB or DDC2B+ may not accept the No. 9 pin. If you are not sure whether your PC system accepts the No. 9 pin or not, use the HD15 (Female) - HD15 (Male without the No. 9 pin) adapter (not supplied). Make sure the male side (without the No. 9 pin) is connected to the computer.

Connecting to a Macintosh or compatible computer



About the supplied Macintosh adapter
The supplied Macintosh adapter is compatible with Macintosh LC, Performa, Quadra and Power Macintosh series computers. Macintosh II series and some older versions of Power Book models may need an adapter with micro switches (not supplied).

Connecting to the 5 BNC connectors

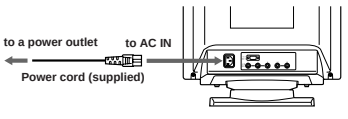


To connect the 5 BNC connectors, use the SMF-400 video signal cable (sold separately). Connect the cables from left to right in the following order: Red–Green–Blue–HD–VD.

Notes
- Do not short the pins of the video signal cable.
- The DDC standard does not apply to the 5 BNC connectors. If you use the DDC standard, connect the HD15 connector to the computer with the supplied video signal cable.

Step 2: Connect the power cord

With the monitor switched off, connect one end of the power cord to the monitor and the other end to a power outlet.



Step 3: Turn on the monitor and computer

The installation of your monitor is complete.

Note

If "OUT OF SCAN RANGE" or "NO INPUT SIGNAL" appears on the screen, see "Warning Messages" on page 20.

For customers using Windows® 95

Install the new model information from the "Windows 95 Monitor Information Disk" into your PC. (To install the file, refer to the attached "About the Windows 95 Monitor Information Disk/File.")

This monitor complies with the "VESA DDC" Plug&Play standard. If your PC/graphics board complies with DDC, select "Plug and Play Monitor (VESA DDC)" as "Monitor type" from "Control Panel" in Windows 95. Some PCs/graphics boards do not comply with DDC. Even if your computer complies with DDC, it may have some problems connecting with this monitor. In this case, select this monitor's model name (GDM-500PS) as "Monitor type" in Windows 95.

For customers using Windows NT4.0

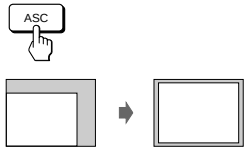
Monitor setup in Windows NT4.0 is different from Windows 95 and does not involve the selection of monitor type. Refer to the Windows NT4.0 instruction manual for further details on adjusting the resolution, refresh rate, and number of colors.

Automatically Adjusting the Size and Centering of the Picture

By pressing the auto sizing and centering (ASC) button, the size and centering of the picture are automatically adjusted to fit the screen.

1 Turn on the monitor and computer.

2 Press the ASC button.
The picture is adjusted to fit the center of the screen.



Notes

- This function is intended for use with a computer running Windows or similar graphic user interface software that provides a full-screen picture. It may not work properly if the background color is dark or if the input picture does not fill the screen to the edges (such as an MS-DOS prompt).
- The screen may go blank for a few seconds while performing the auto-sizing function. This is not a malfunction.
- Although the signals for picture aspect ratio 5:4 (resolution: 1280 × 1024) do not fill the screen to the edges, the picture is accurately displayed.

Selecting the On-screen Display Language

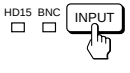
If you need to change the OSD language, see "Using the LANG (Language) On-screen Display" on page 17.
The default setting is English.

Selecting the Input Signal

This monitor has two signal input connectors (HD15 and 5BNC) and can be connected to two computers. When the power of both computers is on, select the input signal you want to view as follows.

1 Turn on the monitor and both computers.

2 Press the INPUT button to select the HD15 or 5BNC input signal.
Each time you press the INPUT button, the input signal and corresponding indicator alternate.



Selecting the INPUT signal mode

This monitor has two modes of input signal selection, "AUTO" and "MANUAL."

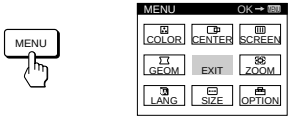
When "AUTO" is selected

If no signal is input from the selected connector, the monitor automatically selects the other connector's signal. When you restart the computer you want to view, or that computer is in power saving mode, the monitor may automatically select the other connector's signal. This is because the monitor switches from the interrupted signal to the constant signal. If this happens, manually select the desired signal using the INPUT button.

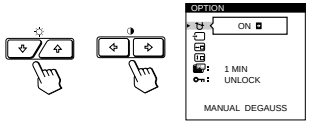
When "MANUAL" is selected

Even if no signal is input from the selected connector, the monitor does not select the other connector's signal.

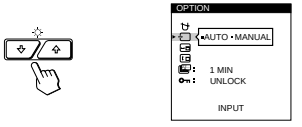
1 Press the MENU button.
The MENU OSD appears.



2 Press the ☼↓/↑ and ◑←/→ buttons to select " OPTION," and press the MENU button again.
The OPTION OSD appears.



3 Press the ☼↓/↑ buttons to select " (INPUT)."



4 Press the ◑←/→ buttons to select "AUTO" or "MANUAL."

The OPTION OSD automatically disappears after about 30 seconds.
To close the OSD, press the MENU button again.

For more information on using the OSD, see "Introducing the On-screen Display System" on page 9.

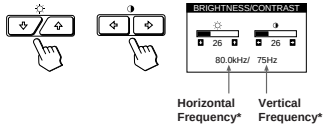
Before adjusting

- Connect the monitor and the computer, and turn them on.
- Select "A LANG" in the MENU OSD, then select "ENGLISH" (English) (see page 17).

Adjusting the Picture Brightness and Contrast

Once the setting is adjusted, it will be stored in memory for all input signals received.

1 Press the ☼ (brightness) ↓/↑ or ◑ (contrast) ←/→ buttons.
The BRIGHTNESS/CONTRAST OSD appears.



2 For brightness adjustment
Press the ☼↓/↑ buttons.

↑ . . . for more brightness
↓ . . . for less brightness

For contrast adjustment
Press the ◑←/→ buttons.

→ . . . for more contrast
← . . . for less contrast

The OSD automatically disappears after about 3 seconds.

To reset, press the RESET button while the OSD is on. The brightness and contrast are both reset to the factory settings.

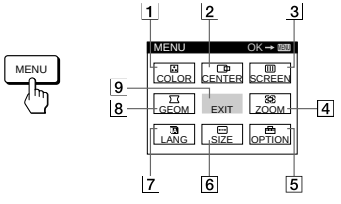
* The horizontal and vertical frequencies for the received input signal appear in the BRIGHTNESS/CONTRAST OSD.

Introducing the On-screen Display System

Most adjustments are made using the MENU OSD.

MENU OSD

Press the MENU button to display the MENU OSD.
This MENU OSD contains links to the other OSDs described below.



EN

1 **COLOR**
Displays the COLOR OSD for adjusting the color temperature.

2 **CENTER**
Displays the CENTER OSD for adjusting the centering of the picture.

3 **SCREEN**
Displays the SCREEN OSD for adjusting the vertical and horizontal convergence, etc.

4 **ZOOM**
Displays the ZOOM OSD for enlarging and reducing the picture.

5 **OPTION**
Displays the OPTION OSD for adjusting the OSD position and degaussing the screen, etc.

6 **SIZE**
Displays the SIZE OSD for adjusting the picture size.

7 **LANG**
Displays the LANGUAGE OSD for selecting the language.

8 **GEOM**
Displays the GEOMETRY OSD for adjusting the picture rotation and pincushion, etc.

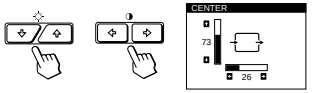
9 **EXIT**
Closes the MENU OSD.

Using the CENTER On-screen Display

The CENTER settings allow you to adjust the centering of the picture.
Once the setting is adjusted, it will be stored in memory for the current input signal.

1 Press the MENU button.
The MENU OSD appears.

2 Press the ☼↓/↑ and ◑←/→ buttons to select " CENTER," and press the MENU button again.
The CENTER OSD appears.



3 For horizontal adjustment
Press the ◑←/→ buttons.

→ . . . to move the picture right
← . . . to move the picture left

For vertical adjustment
Press the ☼↓/↑ buttons.

↑ . . . to move the picture up
↓ . . . to move the picture down

The OSD automatically disappears after about 30 seconds. To close the OSD, press the MENU button again.

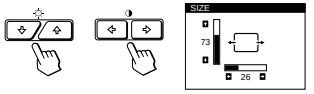
To reset, press the RESET button while the OSD is on. The horizontal and vertical centerings are both reset to the factory settings.

Using the SIZE On-screen Display

The SIZE settings allow you to adjust the size of the picture. Once the setting is adjusted, it will be stored in memory for the current input signal.

1 Press the MENU button.
The MENU OSD appears.

2 Press the ☼↓/↑ and ◑←/→ buttons to select " SIZE," and press the MENU button again.
The SIZE OSD appears.



3 For horizontal adjustment
Press the ◑←/→ buttons.

→ . . . to increase picture size
← . . . to decrease picture size

For vertical adjustment
Press the ☼↓/↑ buttons.

↑ . . . to increase picture size
↓ . . . to decrease picture size

The OSD automatically disappears after about 30 seconds. To close the OSD, press the MENU button again.

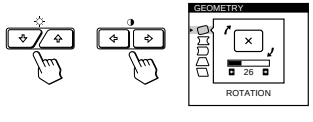
To reset, press the RESET button while the OSD is on. The horizontal and vertical sizes are both reset to the factory settings.

Using the GEOM (Geometry) On-screen Display

The GEOM (geometry) settings allow you to adjust the shape and orientation of the picture.
Once the rotation is adjusted, it will be stored in memory for all input signals received. All other adjustments will be stored in memory for the current input signal.

1 Press the MENU button.
The MENU OSD appears.

2 Press the ☼↓/↑ and ◑←/→ buttons to select " GEOM," and press the MENU button again.
The GEOMETRY OSD appears.



3 Press the ☼↓/↑ buttons to select the item you want to adjust.

Select	To
ROTATION	adjust the picture rotation
PINCUSHION	adjust the picture sides
PIN BALANCE	adjust the picture side balance
KEYSTONE	adjust the picture width
KEY BALANCE	adjust the picture shape balance

4 Press the ◑←/→ buttons to adjust the settings.

For	Press
ROTATION	→ . . . to rotate the picture clockwise
	← . . . to rotate the picture counterclockwise
PINCUSHION	→ . . . to expand the picture sides
	← . . . to contract the picture sides
PIN BALANCE	→ . . . to move the picture sides to the right
	← . . . to move the picture sides to the left
KEYSTONE	→ . . . to increase the picture width at the top
	← . . . to decrease the picture width at the top
KEY BALANCE	→ . . . to move the top of the picture to the right
	← . . . to move the top of the picture to the left

The OSD automatically disappears after about 30 seconds.
To close the OSD, press the MENU button again.

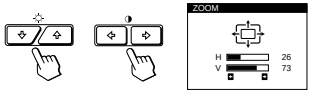
To reset, press the RESET button while the OSD is on.
The selected item is reset to the factory setting.

Using the ZOOM On-screen Display

The ZOOM settings allow you to enlarge or reduce the picture.
Once the setting is adjusted, it will be stored in memory for the current input signal.

1 Press the MENU button.
The MENU OSD appears.

2 Press the ☼↓/↑ and ◑←/→ buttons to select " ZOOM," and press the MENU button again.
The ZOOM OSD appears.



3 Press the ◑←/→buttons to adjust the picture zoom.

→ . . . to enlarge the picture
← . . . to reduce the picture

The OSD automatically disappears after about 30 seconds.
To close the OSD, press the MENU button again.

To reset, press the RESET button while the OSD is on.

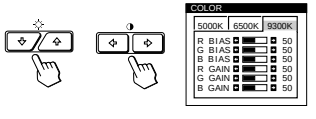
Note
The picture zoom adjustment will stop as soon as either the horizontal or vertical size reaches its maximum or minimum value.

Using the COLOR On-screen Display

You can change the monitor's color temperature. For example, you can adjust or change the colors of a picture on the screen to match the actual colors of the printed picture.
Once the setting is adjusted, it will be stored in memory for all input signals received.

1 Press the MENU button.
The MENU OSD appears.

2 Press the ☼↓/↑ and ◑←/→ buttons to select " COLOR," and press the MENU button again.
The COLOR OSD appears.

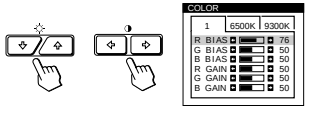


3 Press the ◑←/→ buttons to select the color temperature.

There are three color temperature modes in the OSD.
The preset adjustments are:
5000K, 6500K, 9300K

4 Fine tuning the color temperature

Press the ☼↓/↑ buttons to select an item and adjust by pressing the ◑←/→ buttons.



Select **R (red), G (green), or B (blue) BIAS** to adjust the black level of each color's signal.

Select **R (red), G (green), or B (blue) GAIN** to adjust the white level of each color's signal.

The "5000K," "6500K" or "9300K" disappears and the new color settings are memorized for each of the three color modes.
The color temperature modes change as follows:
5000K→ 1, 6500K→ 2, 9300K→ 3

The OSD automatically disappears after about 30 seconds. To close the OSD, press the MENU button again.

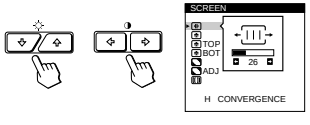
To reset, press the RESET button while the OSD is on. The selected item is reset to the factory settings.

Using the SCREEN On-screen Display

You can adjust convergence settings to eliminate red or blue shadows that may appear around objects on the screen.
Adjust the CANCEL MOIRE function to eliminate wavy or elliptical patterns that may appear on the screen.
Adjust the LANDING function to correct color imbalances at the four corners of the screen due to influence from the earth's magnetism.
Once CANCEL MOIRE is adjusted, it will be stored in memory for the current input signal. All other adjustments will be stored in memory for all input signals received.

1 Press the MENU button.
The MENU OSD appears.

2 Press the ☼↓/↑ and ◑←/→ buttons to select " SCREEN," and press the MENU button again.
The SCREEN OSD appears.



3 Press the ☼↓/↑ buttons to select the item you want to adjust.

Select	To
H CONVERGENCE	adjust the horizontal convergence
V CONVERGENCE	adjust the vertical convergence
TOP V CONVER TOP	adjust the screen's upper vertical convergence
BOT V CONVER BOTTOM	adjust the screen's lower vertical convergence

(continued)

Select	To
LANDING	select one of the four corners that needs color correction due to influence from the earth's magnetism
ADJ LANDING ADJUST	correct the color at one of the four corners of the screen
CANCEL MOIRE *	turn the moire cancellation function "ON" or "OFF." CANCEL MOIRE must be "ON" for " ADJ (MOIRE ADJUST)" to appear on the screen.
ADJ MOIRE ADJUST	adjust the degree of moire cancellation

* Moire is a type of natural interference which produces soft or wavy lines on your screen. It may appear due to interference between the regulated pattern of the picture from the input signal and the phosphor pitch pattern of the CRT.

Example of moire:

4 Press the ◑←/→ buttons to adjust the settings.

For	Press
H CONVERGENCE	→ . . . to shift red shadows to the right and blue shadows to the left ← . . . to shift red shadows to the left and blue shadows to the right
V CONVERGENCE	→ . . . to shift red shadows up and blue shadows down ← . . . to shift red shadows down and blue shadows up
TOP V CONVER TOP	→ . . . to shift red shadows up and blue shadows down ← . . . to shift red shadows down and blue shadows up
BOT V CONVER BOTTOM	→ . . . to shift red shadows up and blue shadows down ← . . . to shift red shadows down and blue shadows up
LANDING	→ or ← . . . to select the corner of the screen you want to adjust : top left : top right : bottom left : bottom right
ADJ LANDING ADJUST	→ or ← . . . to reduce any irregularities in the color to a minimum
CANCEL MOIRE	→ . . . to turn CANCEL MOIRE "ON" ← . . . to turn CANCEL MOIRE "OFF"
ADJ MOIRE ADJUST	→ or ← . . . to adjust the screen until the moire is at a minimum

Note

The picture may become fuzzy when CANCEL MOIRE is set to "ON."

The OSD automatically disappears after about 30 seconds. To close the OSD, press the MENU button again.

To reset, press the RESET button while the OSD is on. The selected item is reset to the factory setting.

EN

Using the OPTION On-screen Display

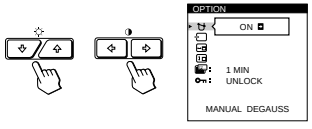
The OPTION OSD allows you to manually degauss the screen and adjust settings such as the OSD position and power saving delay time. It also allows you to lock the controls.

Degaussing the screen

The monitor screen is automatically degaussed (demagnetized) when the power is turned on.
You can also manually degauss the monitor.

1 Press the MENU button.
The MENU OSD appears.

2 Press the ☼↓/↑ and ◑←/→ buttons to select " OPTION," and press the MENU button again.
The OPTION OSD appears.



3 Press the ☼↓/↑ buttons to select " (MANUAL DEGAUSS)."

4 Press the ◑→ button.
The screen is degaussed for about 3 seconds.

If you need to degauss the screen a second time, wait for at least 20 minutes before repeating the steps above.

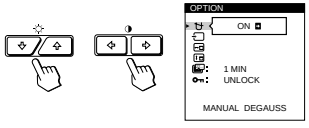
The OPTION OSD automatically disappears after about 30 seconds.
To close the OSD, press the MENU button again.

Changing the on-screen display position

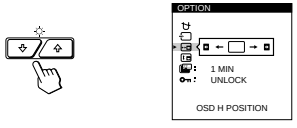
You can change the OSD position (for example, when you want to adjust the picture behind the OSD).

1 Press the MENU button.
The MENU OSD appears.

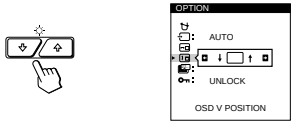
2 Press the ☼↓/↑ and ◑←/→ buttons to select " OPTION," and press the MENU button again.
The OPTION OSD appears.



3 Press the ☼↓/↑ buttons to select " (OSD H POSITION)" or " (OSD V POSITION)."
Select " (OSD H POSITION)" to adjust the horizontal position.



Select " (OSD V POSITION)" to adjust the vertical position.



4 Press the ◑←/→ buttons to move the OSD to the desired position.

The OPTION OSD automatically disappears after about 30 seconds.
To close the OSD, press the MENU button again.

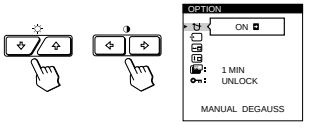
To reset, press the RESET button while the OSD is on.

Setting the power saving delay time

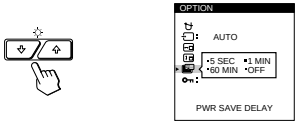
You can set the delay time before the monitor enters the power saving mode. See page 19 for more information on this monitor's power saving capabilities.

1 Press the MENU button.
The MENU OSD appears.

2 Press the ☼↓/↑ and ◑←/→ buttons to select " OPTION," and press the MENU button again.
The OPTION OSD appears.



3 Press the ☼↓/↑ buttons to select " (PWR SAVE DELAY)."



4 Press the ◑←/→ buttons to select the desired time.

When PWR SAVE DELAY is set to "OFF," the monitor does not go into power saving mode.

The OPTION OSD automatically disappears after about 30 seconds.
To close the OSD, press the MENU button again.

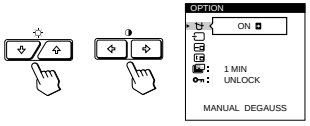
To reset, press the RESET button while the OSD is on.

Locking the controls

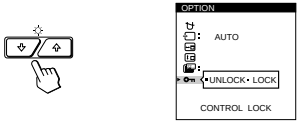
The control lock function disables all of the buttons on the front panel except the ⏻ (power) switch, MENU and INPUT buttons.

1 Press the MENU button.
The MENU OSD appears.

2 Press the ☼↓/↑ and ◑←/→ buttons to select " OPTION," and press the MENU button again.
The OPTION OSD appears.



3 Press the ☼↓/↑ buttons to select " (CONTROL LOCK)."



4 Press the ◑←/→ buttons to select "LOCK."

The OPTION OSD automatically disappears after about 30 seconds.
To close the OSD, press the MENU button again.

Once you select "LOCK," you cannot select any items except "EXIT" and " OPTION" in the MENU OSD.
If you press any button other than the ⏻ (power) switch, MENU and INPUT buttons, the 🔑 mark appears on the screen.

To cancel the control lock

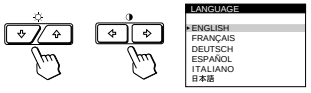
Repeat steps 1 through 3 above and press the ◑←/→ buttons to select "UNLOCK."

Using the LANG (Language) On-screen Display

English, French, German, Spanish, Italian and Japanese versions of the OSDs are available.

1 Press the MENU button.
The MENU OSD appears.

2 Press the ☼↓/↑ and ◑←/→ buttons to select " LANG," and press the MENU button again.
The LANGUAGE OSD appears.



3 Press the ☼↓/↑ buttons to select the desired language.

ENGLISH: English, FRANÇAIS: French,
DEUTSCH: German, ESPAÑOL: Spanish,
ITALIANO: Italian, or 日本語 : Japanese.

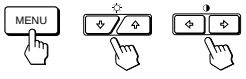
The OSD automatically disappears after about 30 seconds. To close the OSD, press the MENU button again.

To reset to English, press the RESET button while the OSD is on.

Resetting the Adjustments

Resetting an adjustment item

1 Press the MENU, ☼↓/↑ and ◑←/→buttons to select the OSD containing the item you want to reset.



2 Press the ☼↓/↑ buttons to select the item you want to reset.

3 Press the RESET button.

Resetting all of the adjustment data for the current input signal

When there is no OSD displayed, press the RESET button.
All of the adjustments data for the current input signal is reset to the factory settings.
Note that adjustment data not affected by changes in input signal (OSD language, OSD position, input signal selection, power saving delay time and the control lock function) is not reset to the factory settings.

Resetting all of the adjustment data for all input signals

Press and hold the RESET button for more than two seconds.
All of the adjustment data, including the brightness and contrast, is reset to the factory settings.

EN

1-7

Preset and User Modes

This monitor has factory preset modes for the 27 most popular industry standards for true "plug and play" compatibility.

When a new input signal is entered, the monitor selects the appropriate factory preset mode and momentarily adjusts the phase calibration to provide a high quality picture to the center of the screen. The calibration is stored in memory and is immediately recalled whenever the same input signal is received.

No.	Resolution (dots × lines)	Horizontal Frequency	Vertical Frequency	Graphics Mode
1	640 × 350	31.5 kHz	70 Hz	MCGA
2	640 × 480	31.5 kHz	60 Hz	VGA-G
3	640 × 480	37.5 kHz	75 Hz	EVGA
4	640 × 480	43.3 kHz	85 Hz	VESA
5	720 × 400	31.5 kHz	70 Hz	VGA-Text
6	720 × 400	37.9 kHz	85 Hz	VESA
7	800 × 600	37.9 kHz	60 Hz	SVGA
8	800 × 600	46.9 kHz	75 Hz	ESVGA
9	800 × 600	53.7 kHz	85 Hz	VESA
10	832 × 624	49.7 kHz	75 Hz	Macintosh 16″ Color
11	1024 × 768	48.4 kHz	60 Hz	VESA
12	1024 × 768	56.5 kHz	70 Hz	VESA
13	1024 × 768	60.0 kHz	75 Hz	EUVGA
14	1024 × 768	60.2 kHz	75 Hz	Macintosh 19″ Color
15	1024 × 768	68.7 kHz	85 Hz	VESA
16	1152 × 864	67.5 kHz	75 Hz	VESA
17	1152 × 870	68.7 kHz	75 Hz	Macintosh 21″ Color
18	1280 × 960	60.0 kHz	60 Hz	VESA
19	1280 × 960	85.9 kHz	85 Hz	VESA
20	1280 × 1024	64.0 kHz	60 Hz	VESA
21	1280 × 1024	80.0 kHz	75 Hz	VESA
22	1280 × 1024	91.1 kHz	85 Hz	VESA
23	1600 × 1200	75.0 kHz	60 Hz	VESA
24	1600 × 1200	81.3 kHz	65 Hz	VESA
25	1600 × 1200	87.5 kHz	70 Hz	VESA
26	1600 × 1200	93.8 kHz	75 Hz	VESA
27	1600 × 1200	106.3 kHz	85 Hz	VESA

For input signals that do not match one of the factory preset modes, the digital Multiscan technology of this monitor performs all of the adjustments necessary to ensure that a clear picture appears on the screen for any timing in the monitor's frequency range. However, it may be necessary to fine tune the vertical/horizontal size and centering. Simply press the ASC button or adjust the monitor according to the adjustment instructions. The adjustments are stored automatically as a user mode and recalled whenever the corresponding input signal is received. A total of 15 user adjusted modes can be stored in memory, including those made with the ASC button. If a 16th mode is entered, it will replace the first.

Recommended horizontal and vertical timing conditions

Horizontal sync width duty should be: >4.8% of total horizontal time.
Horizontal blanking width should be: >2.5 μsec.
Vertical blanking width should be: > 450 μsec.

Note for Windows® users

For Windows users, check your video board manual or the utility program which comes with your graphic board and select the highest available refresh rate to maximize monitor performance.

Adjusting the monitor's resolution and color number

If you are using Windows 95, adjust the monitor's resolution and color number according to the steps below. Refer also to the Windows 95 HELP files.
If you are using a Macintosh or compatible computer, Refer to your computer's instruction manual.

1 Click the Start button and point to Settings. Then double-click the Control Panel.

2 Double-click the Display icon.

3 Click Settings.

4 Click the Color palette. Point to the desired color number and click.
Point to the Desktop area and drag the slider to the desired resolution.

5 Click OK.

Note

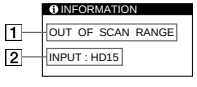
Some settings may require that the computer be turned off then back on to take effect. In this case, follow the on-screen instructions.

About the color number

- The Color palette setting and the actual number of colors is as follows:
  High Color (16 bit) → 65,536 colors
  True Color (24 bit) → about 1,677 million colors
- In True color mode (24 bit), speed may be slower.
- The color number may vary according to your computer or video board.

Warning Messages

If there is something wrong with the input signal, one of the following messages appears.



1 The input signal condition

"OUT OF SCAN RANGE" indicates that the input signal is not supported by the monitor's specifications.

"NO INPUT SIGNAL" indicates that no signal is input, or the input signal from the selected input connector is not received.

2 The selected input connector

Indicates which input connector is receiving the wrong signal. If there is something wrong with the signal from both input connectors, "HD15" and "BNC" are displayed alternately.

To solve these problems, see "Troubleshooting" below.

Troubleshooting

This section may help you isolate the cause of a problem and as a result, eliminate the need to contact technical support.

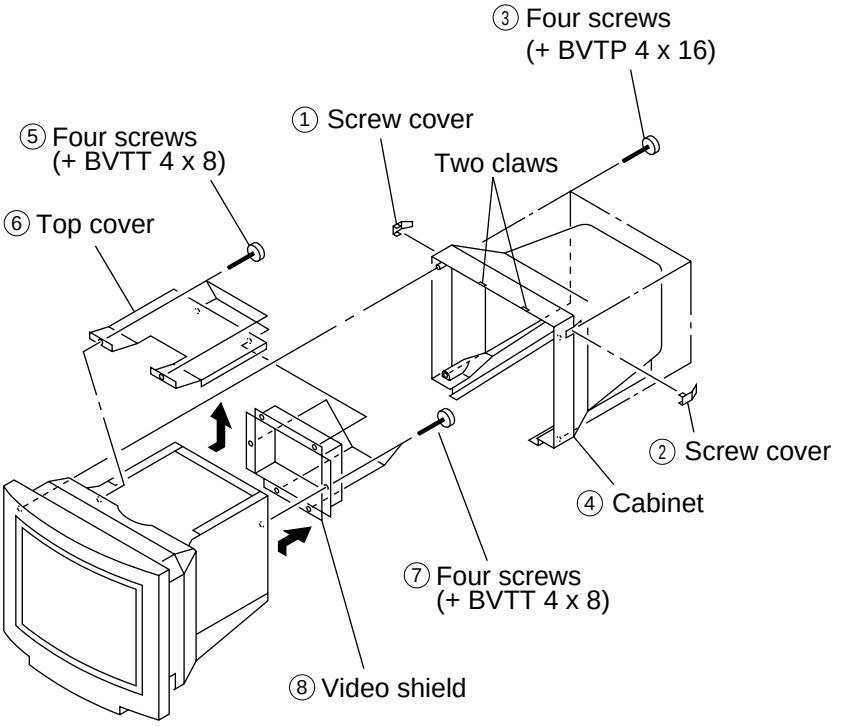
Symptom	Check these items
No picture	
If the ⏻ indicator is not lit	• Check that the power cord is properly connected. • Check that the ⏻ (power) switch is in the "on" position.
If the "NO INPUT SIGNAL" message appears on the screen, or if the ⏻ indicator is either orange or alternating between green and orange	• The screen is blank when the monitor is in power saving mode. Try pressing any key on the computer keyboard. • Check that your computer power switch is in the "on" position. • Check that the input select setting is correct. • Check that the video signal cable is properly connected and all plugs are firmly seated in their sockets. • Check that the 5 BNCs are connected in the correct order (from left to right: Red–Green–Blue–HD–VD) (page 6). • Ensure that no pins are bent or pushed in the HD15 video input connector. • Check that the video board is completely seated in the proper bus slot.
If the "OUT OF SCAN RANGE" message appears on the screen	• Check that the video frequency range is within that specified for the monitor. (Horizontal: 30 – 107 kHz, Vertical: 48 – 160 Hz) Refer to your computer's instruction manual to adjust the video frequency range. • If you are using a video signal cable adapter, check that it is correct.
If no message is displayed and the ⏻ indicator is green or flashing orange	• See "Self-diagnosis Function" (page 22).
If using a Macintosh system	• Check that the Macintosh adapter and the video signal cable are properly connected (page 6).
If using Windows® 95	• If you cannot find "GDM-500PS" among the Sony monitors in the Windows 95 monitor selection screen, select the DDC standard monitor or install the Windows 95 Monitor Information Disk (page 7). The DDC standard does not apply to the 5 BNC connectors. If you use the DDC standard, connect the computer to the HD15 connector with the supplied video signal cable.
Picture is scrambled	• Check your graphics board manual for the proper monitor setting. • Check this manual and confirm that the graphics mode and the frequency you are trying to operate at is supported. Even if the frequency is within the proper range, some video boards may have a sync pulse that is too narrow for the monitor to sync correctly.

Symptom	Check these items
Color is not uniform	• Degauss the monitor (page 15). If you place equipment which generates a magnetic field, such as a loudspeaker, near the monitor, or you change the direction of the monitor, color may lose uniformity. The degauss function demagnetizes the metal frame of the CRT to obtain a neutral field for uniform color reproduction. If a second degauss cycle is needed, allow a minimum interval of 20 minutes for the best result. • Adjust the landing (pages 13 – 14).
You cannot adjust the monitor with the buttons on the front panel	• If the control lock function is set to on, set it to off using the OPTION OSD (page 16).
White does not look white	• Adjust the color temperature (pages 12 – 13). • Check that the 5 BNCs are connected in the correct order (from left to right: Red–Green–Blue–HD–VD) (page 6).
Screen image is not centered or sized properly	• Press the ASC button (page 7). • Adjust the size or centering (page 10). • Some video modes do not fill the screen to the edges. This problem tends to occur with certain video boards.
Edges of the image are curved	• Adjust the geometry (page 11).
White lines show red or blue shadows at edges	• Adjust the convergence (pages 13 – 14).
Picture is fuzzy	• Adjust the contrast and brightness (page 9). • Degauss the monitor (page 15). If you place equipment which generates a magnetic field, such as a loudspeaker, near the monitor, or you change the direction of the monitor, color may lose uniformity. The degauss function demagnetizes the metal frame of the CRT to obtain a neutral field for uniform color reproduction. If a second degauss cycle is needed, allow a minimum interval of 20 minutes for the best result. • If red or blue shadows appear along the edges of images, adjust the convergence (pages 13 – 14). • If the moire is cancelled, the picture may become fuzzy. Decrease the moire cancellation effect (pages 13 – 14).
Picture bounces or has wavy oscillations	• Isolate and eliminate any potential sources of electric or magnetic fields. Common causes for this symptom are electric fans, fluorescent lighting or laser printers. • If you have another monitor close to this monitor, increase the distance between them to reduce the interference. • Try plugging the monitor into a different AC outlet, preferably on a different circuit. • Try the monitor on a different computer in a different room.
Picture is flickering	• Set the refresh rate on the computer to obtain the best possible picture by referring to the computer's manual.
Picture appears to be ghosting	• Eliminate the use of video cable extensions and/or video switch boxes if this symptom occurs. Excessive cable length or a weak connection can produce this symptom.
Wavy or elliptical (moire) pattern is visible	• Cancel the moire (pages 13 – 14). The moire may be modified depending on the connected computer. • Due to the relationship between resolution, monitor dot pitch and the pitch of some image patterns, certain screen backgrounds sometimes show moire. Change your desktop pattern.
Two fine horizontal lines (wires) are visible	• These wires stabilize the vertically striped aperture grille (page 19). This aperture grille allows more light to pass through to the screen giving the Trinitron CRT more color and brightness.
Hum is heard right after the power is turned on	• When the power is turned on, the auto-degauss cycle is activated. While the auto-degauss cycle is activated (3 seconds), a hum may be heard. The same hum is heard when the monitor is manually degaussed. This is not a malfunction.

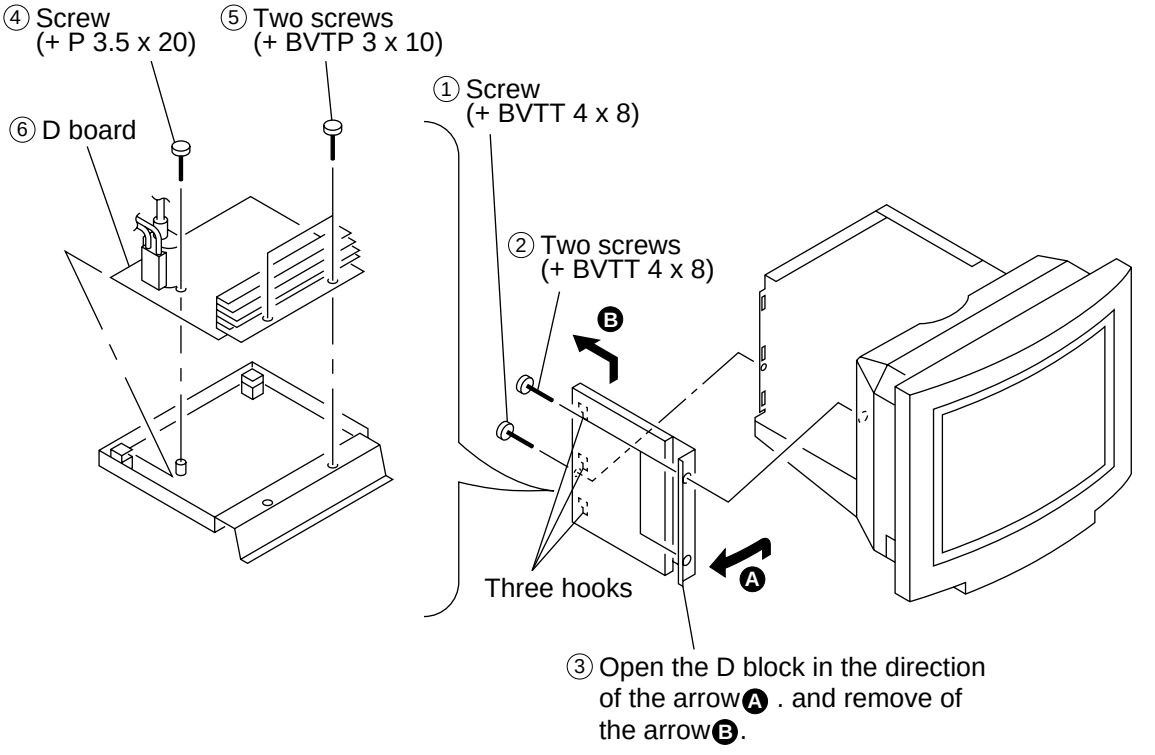
MEMO

SECTION 2
DISASSEMBLY

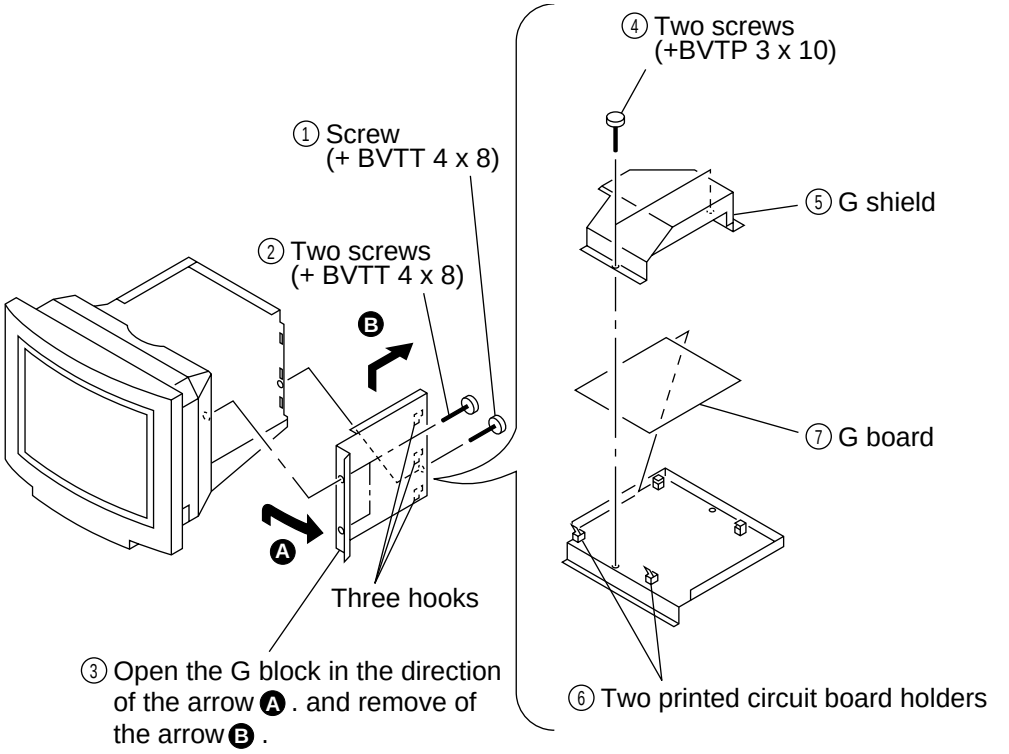
2-1. CABINET REMOVAL



2-2. D BOARD REMOVAL

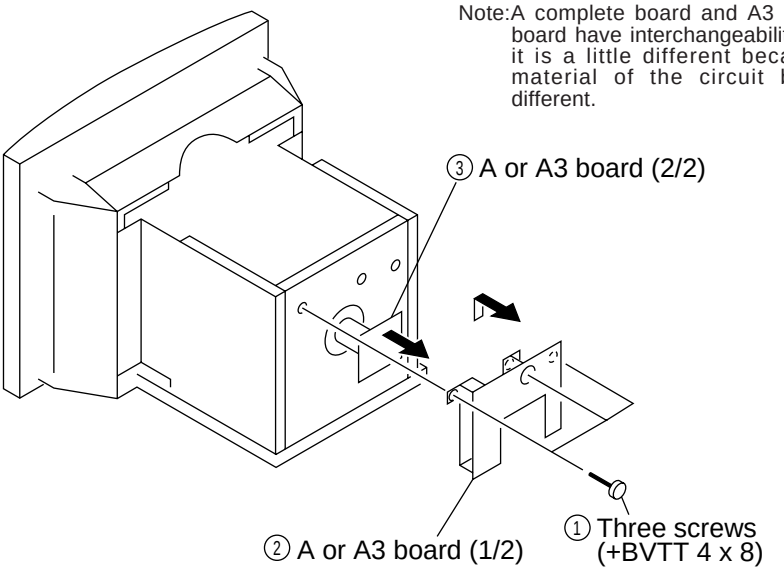


2-3. G BOARD REMOVAL

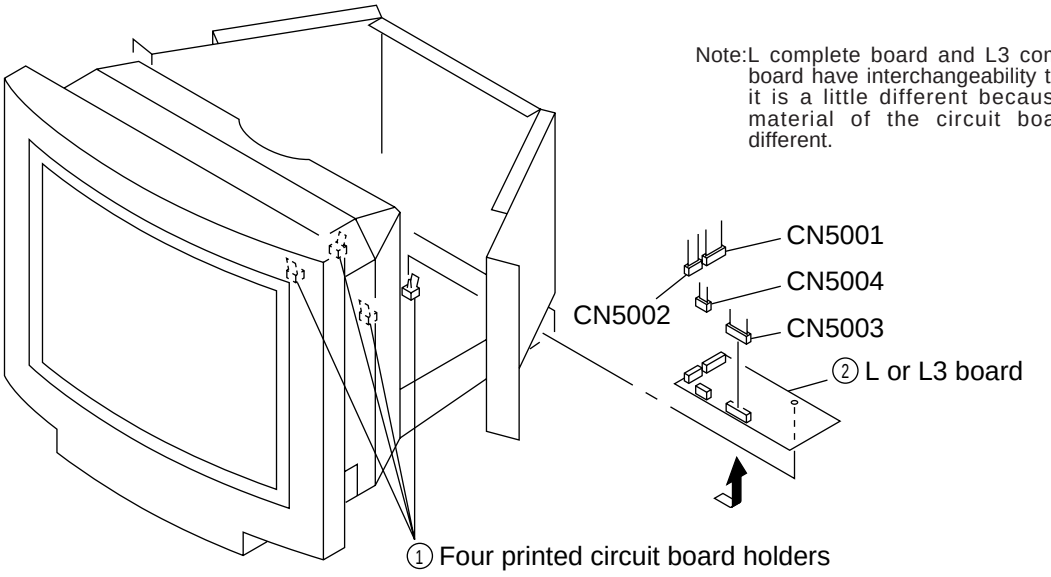

④ Two screws
(+BVTP 3 x 10)
① Screw
(+ BVTT 4 x 8)
⑤ G shield
② Two screws
(+ BVTT 4 x 8)
B
⑦ G board
A
Three hooks
③ Open the G block in the direction of the arrow A . and remove of the arrow B .
⑥ Two printed circuit board holders

2-4. A or A3 BOARD REMOVAL

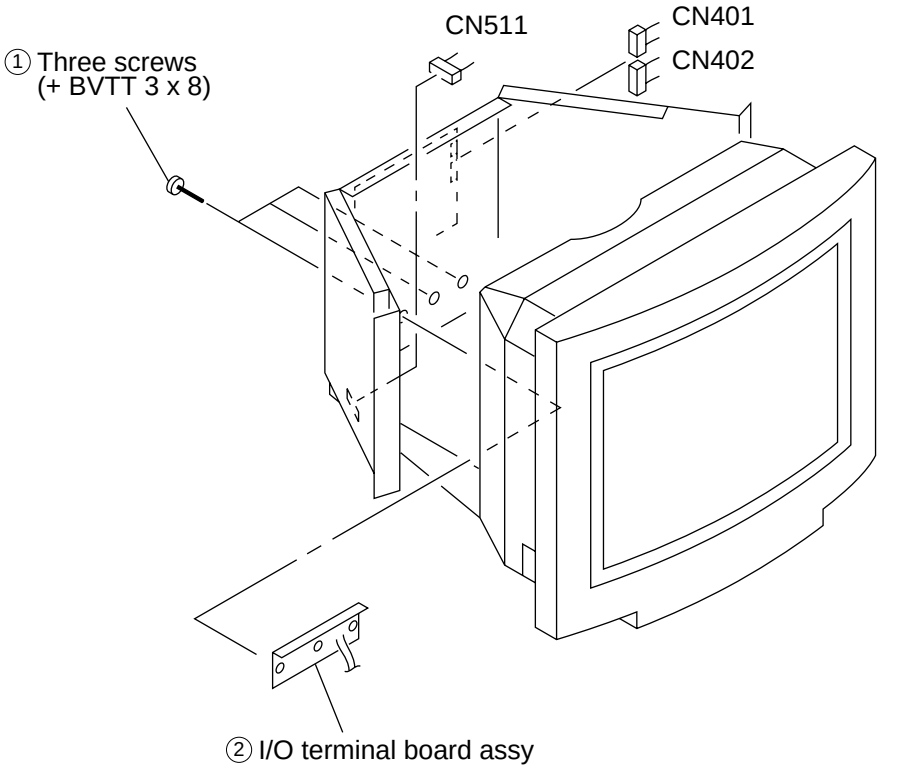
Note:A complete board and A3 complete board have interchangeability though it is a little different because the material of the circuit board is different.



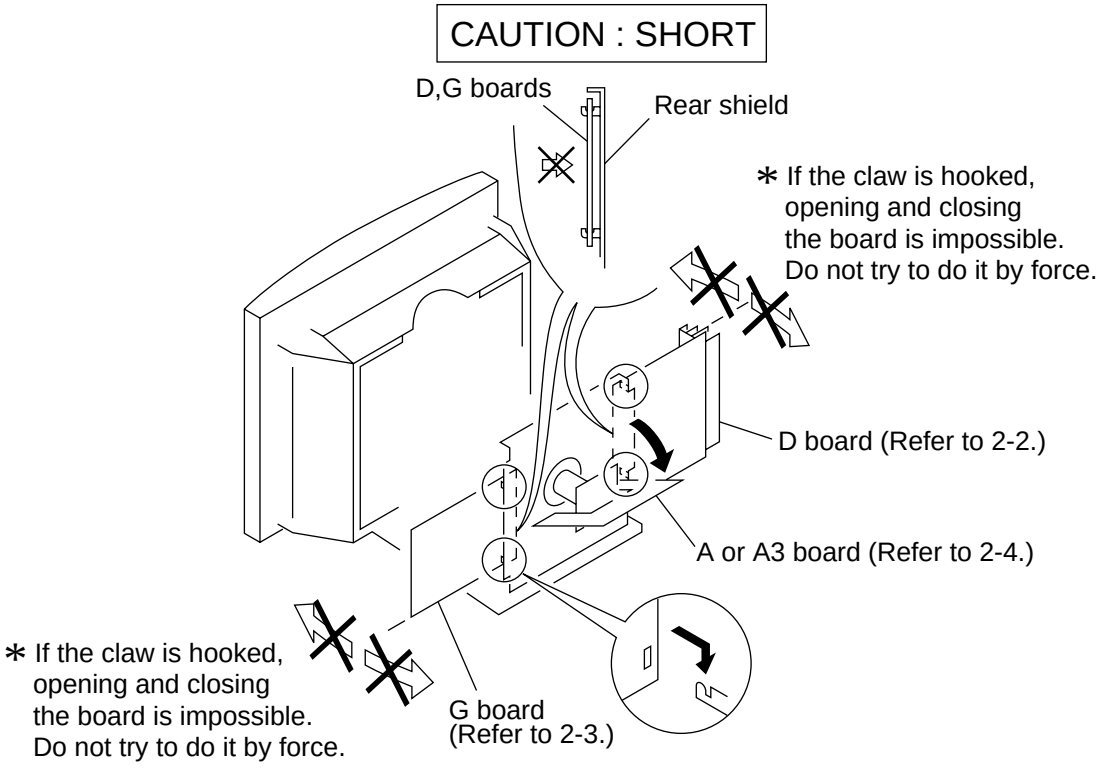
2-5. L or L3 BOARD REMOVAL


Note: L complete board and L3 complete board have interchangeability though it is a little different because the material of the circuit board is different.
CN5001
CN5004
CN5002
CN5003
② L or L3 board
① Four printed circuit board holders

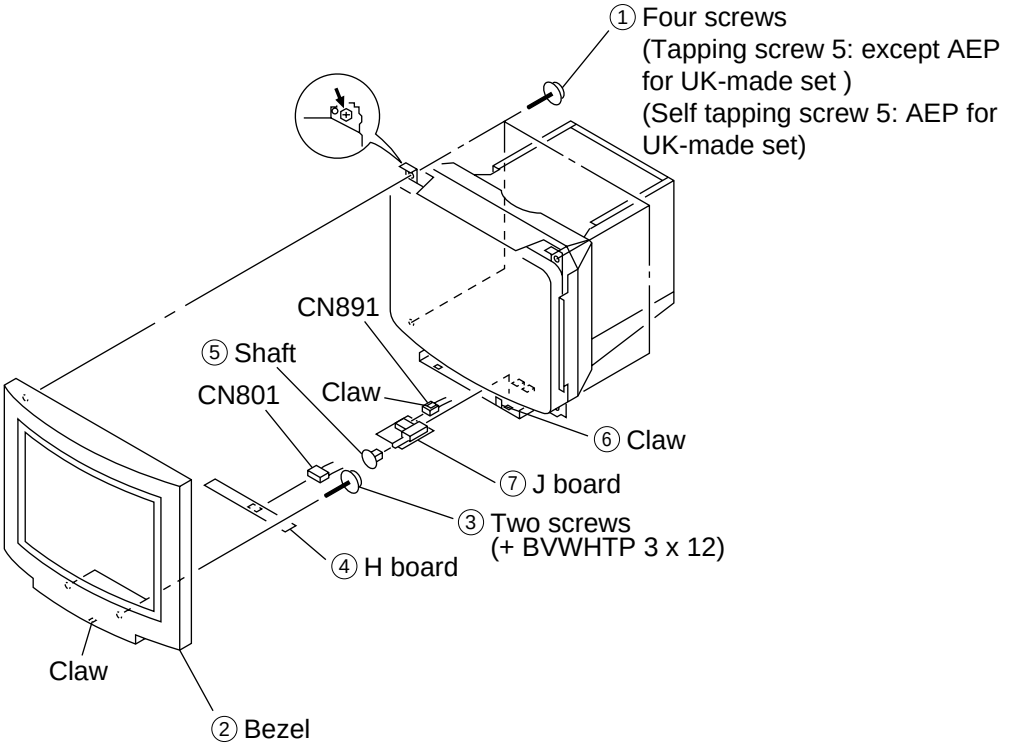
2-6. I/O TERMINAL BOARD ASSY REMOVAL



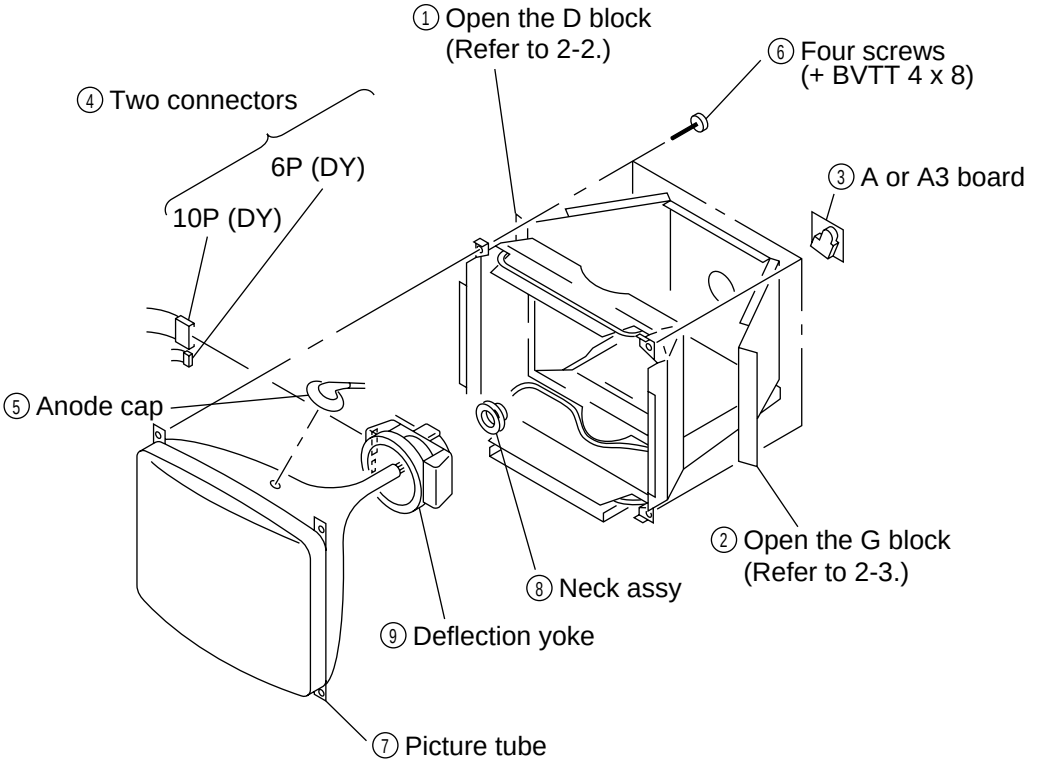
2-7. SERVICE POSITION


CAUTION : SHORT
D,G boards
Rear shield
* If the claw is hooked, opening and closing the board is impossible. Do not try to do it by force.
D board (Refer to 2-2.)
A or A3 board (Refer to 2-4.)
* If the claw is hooked, opening and closing the board is impossible. Do not try to do it by force.
G board (Refer to 2-3.)

2-8. H AND J BOARDS REMOVAL


① Four screws (Tapping screw 5: except AEP for UK-made set) (Self tapping screw 5: AEP for UK-made set)
CN891
⑤ Shaft
CN801
Claw
⑥ Claw
⑦ J board
③ Two screws (+ BVWHTP 3 x 12)
④ H board
Claw
② Bezel

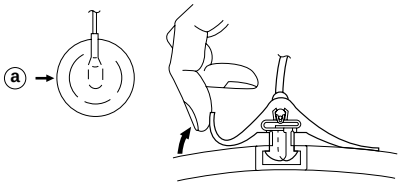
2-9. PICTURE TUBE REMOVAL



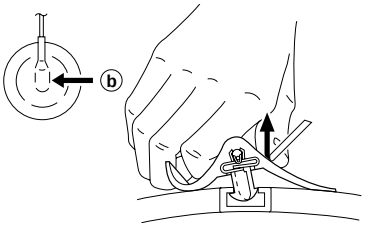
• REMOVAL OF ANODE-CAP

NOTE: Short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon painted on the CRT, after removing the anode.

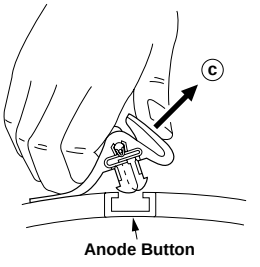
• REMOVING PROCEDURES



① Turn up one side of the rubber cap in the direction indicated by the arrow ⓐ.



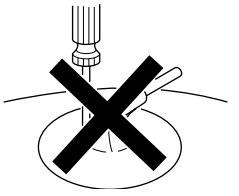
② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow ⓑ.

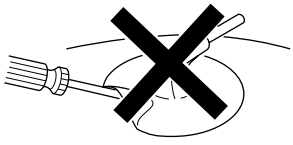


③ When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling up it in the direction of the arrow ⓒ.

• HOW TO HANDLE AN ANODE-CAP

① Don't hurt the surface of anode-caps with shartp shaped material!
② Don't press the rubber hardly not to hurt inside of anode-caps!
A material fitting called as shatter-hook terminal is built in the rubber.
③ Don't turn the foot of rubber over hardly!
The shatter-hook terminal will stick out or hurt the rubber.





SECTION 3
SAFETY RELATED ADJUSTMENT

When replacing or repairing the shown below table, the following operational checks must be performed as a safety precaution against X-rays emissions from the unit.

	Part Replaced (◪)
HV Regulator Circuit Check	D Board IC901, T902 • Mounted D board
HV Protector Circuit Check	D Board Q660, Q661, D916, D935, C924, R665, R667, R940, R980, T902 • Mounted D board G Board PH680, Q680, Q683, D680, R680, R685, R686, R687, R688, R689 • Mounted G board
Beam Current Protector Circuit Check	D Board IC901, D904, D907, D908, R011, R908, R909, R921, R925, R926, R929, R930, T902 • Mounted D board

Check Condition

Input voltage : 100 ~ 240 VAC
Input signal : White Cross Hatch at 107 kHz
Beam control : BRT and CONT → Minimum
B+ voltage : 195 ~ 205 VDC

a) HV Regulator Circuit Check

1) Confirm that the voltage of the pin ② of CN901 on D board is within the voltage range shown below.
Standard: 9.00 ± 0.065 VDC

b) HV Protector Circuit Check

1) Confirm that the HV protector circuit works and TV Raster disappears when apply the voltage as shown below between pin ③ of CN901 on D board and GND using an external DC power supply.
Check Condition: Less than 34.10 VDC

c) Beam Current Protector Circuit Check-1

1) Measure HV voltage and record that value.
2) Shorted between pin ① and pin ④ of CN901 on D board.
3) Connect to the Constant Current Jig (A) between pin ① of CN901 on D board and GND, confirm that the Beam Current Protector Circuit works and HV go down more than 1.25 kV from the value of (1).
Check Condition: 1.50 mA

d) Beam Current Protector Circuit Check-2

1) Connect to the Constant Current Jig (B) between pin ① of CN901 on D board and GND, confirm that the Beam Current Protector Circuit works and TV Raster disappears.
Check Condition: 1.59 mA

e) Voltage of 3rd winding of FBT

1) Confirm that the voltage of pin ③ of CN901 on D board is within the voltage range shown below.
Standard: more than 28.0 VDC

SECTION 4
ADJUSTMENTS

Note: Hand degauss must be used on stand-by or power-off condition.
This model has an automatic earth magnetism correction function by using an earth magnetism sensor and a LCC coil. When using a hand degauss while monitor (LCC coil) is being operated, it sometimes gets magnetized, and the system may not work properly as a result.

• Landing Rough Adjustment

1. Enter the full white signal. (or the full black dots signal).
2. Adjust the contrast to the maximum.
3. Make the screen monogreen.

Note: Off the outputs from R ch and B ch of SG.

4. Reverse the DY, and adjust coarsely the purity magnet so that a green raster positions in the center of screen.
5. Adjust the tilt of DY, and fix lightly with a clamp.

Note: "TILT" shall be set at 0.

• Landing Fine Adjustment

1. Put the set inside the Helmholtz coil. ("LCC SW" = "12")
2. Input the single green signal and set the CONT control to MAX.

Note: After the W/B adjustment with 9300K, measure an average of ΣIk when a full white signal is entered in the CONT MAX/BRT CENT status. Then make adjustment so that the specified screen can be attained after aging for 2 hours with Ik equivalent to 30% of the average value.

3. Demagnetize the metal part of the chassis with the hand degausser and coil degausser, and the CRT surface with the hand degausser.
   Input AC 230V to AC IN, turn on and off the power to perform auto degaussing. (Perform auto degaussing by setting "MON CON REG2"=152. Return to the original value after use.)
   Demagnetize the CRT surface with the hand degausser again.

Note:

(1) Hand degauss must be used on stand-by or power-off condition.
   This model has an automatic earth magnetism correction function by using an earth magnetism sensor and a LCC coil. When using a hand degauss while monitor (LCC coil) is being operated, it sometimes gets magnetized, and the system may not work properly as a result.
(2) Adjust in a non-magnetic field. BV=45uT.
(3) If adjusting in a magnetic fields, add the shift from the non-magnetic field in your estimation.

4. Attach the wobbling coil to the designated part of the CRT neck.
5. Attach the sensor of the landing adjustment unit on the CRT surface.
6. Adjust the DY position and purity, and the DY tilt, and landing of the center and 4 corners with the landing checker.
   After adjustment, set "LCC SW" to "13".
   • Write terrestrial magnetism sensor reading VX and VY to "LCC VX" and LCC VY" respectively. Adjust the landing by moving "LCC NS", "LCC LT", "LCC LB", "LCC RT" and "LCC RB". However, the register adjustment must be limited within the following range.
   "LCC NS" 128 ± 15
   "LCC LT", "LCC LB", "LCC RT", "LCC RB" 128 ± 40
   Save the service data.

<Specifications>
Adjust so that the green is within the specification given right.
4 corner adjust target : within ± 1

(μm)

0 ± 3	0 ± 7.5	0 ± 3
0 ± 5	0 ± 5	0 ± 5
0 ± 3	0 ± 7.5	0 ± 3

The red and blue must be within the specification given right with respect to the green.

(μm)

± 6	± 6	± 6
± 6	± 4	± 6
± 6	± 6	± 6

A difference between red and blue must be within the specification given right.

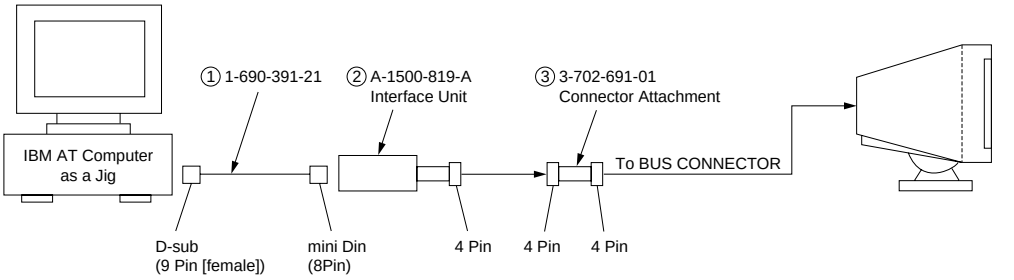
(μm)

10	10	10
10	7	10
10	10	10

* Adjustment and measurement should be made at the points one inch inside the fluorescent screen.

7. For the up/down swing, swing the DY and insert a wedge so that the up and down pins are equal at the top and bottom. Adjust the DY TLV VR so that the horizontal trapezoid is equal at the left and right. Insert the wedge firmly so that the DY does not shake.
8. Check the landing of each corner, and if it does not satisfy the specification, adjust the landing of four corners using "LCC LT", "LCC LB", "LCC RT" and "LCC RB".
   However, the register adjustment must be limited within the following range.
   "LCC NS" 128 ± 15
   "LCC LT", "LCC LB", "LCC RT", "LCC RB" 128 ± 40
   After adjustment, save the service data.
9. Remove the sensor and wobbling coil.
10. Switch the signal to R.G.B., and check that each color is pure.
11. Check that the DY is not tilting.

Connect the communication cable of the computer to the connector located on the D board on the monitor. Run the service software and then follow the instruction.



*The parts above (① ~ ③) are necessary for DAS adjustment.

- **Convergence Rough Adjustment**

(1) Receive an image of the white crosshatch signals (white lines on black).
(2) Place the protrusions of the 6-fold poles magnet attached to the CRT neck upon each other. (Fig. 1)
(3) Make rough adjustment of the H and V direction convergence by using 4-fold poles magnet.
(4) Make a rough adjustment of the V direction convergence by using "V. STAT".

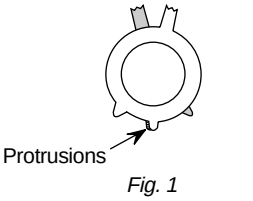


Fig. 1

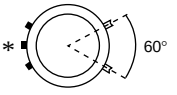


Fig. 3

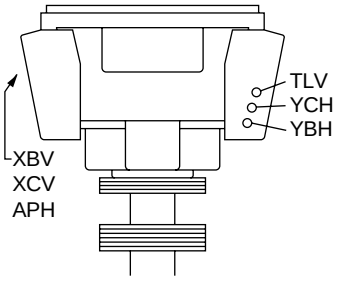
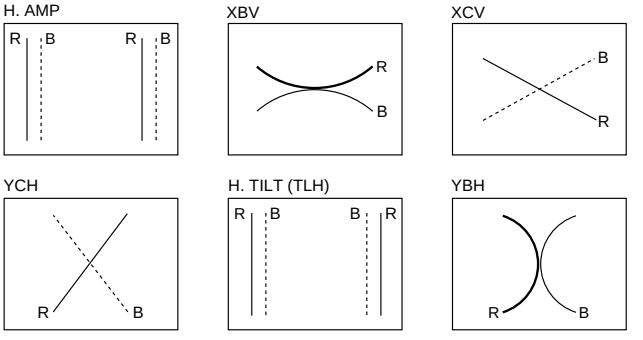
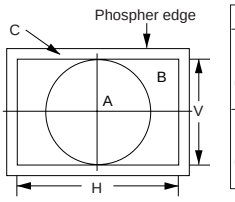


Fig. 2

* Set so that the protruding parts of the 2 magnet rings agree with each other.



- **Convergence Specification**

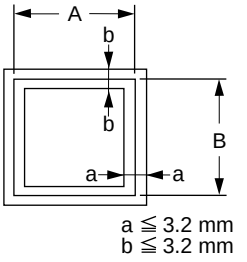


MODE	Zone	N. Hemisphere	S. Hemisphere
fH≥ 60 kHz	A Zone	0.24 mm	0.24 mm
	B Zone	0.24 mm	0.28 mm
	C Zone	0.32 mm	0.32 mm
fH≤ 60 kHz	A Zone	0.24 mm	0.28 mm
	B Zone	0.32 mm	0.36 mm
	C Zone	0.36 mm	0.40 mm

- **White Balance Adjustment Specification**

(1) 9300K
x = 0.281 ± 0.005
y = 0.311 ± 0.005
(All White)
(2) 6500K
x = 0.313 ± 0.005
y = 0.329 ± 0.005
(All White)

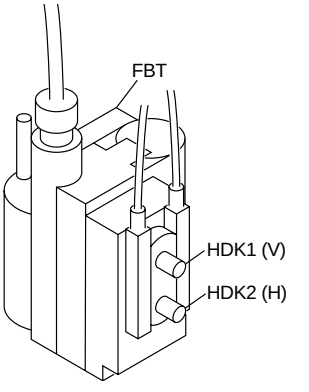
- **Vertical and Horizontal Position and Size Specification**



MODE	1, 2
A	388 mm
B	291 mm

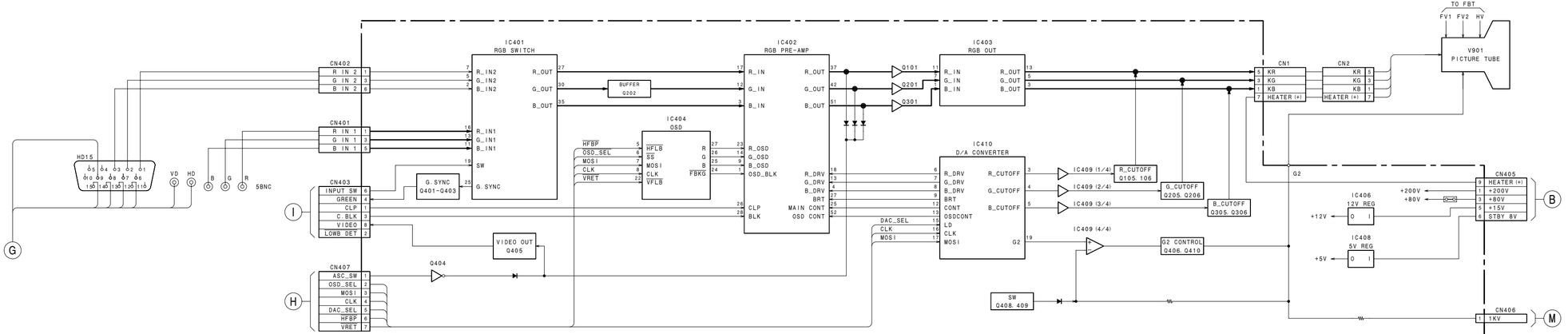
- **Focus adjustment**

Adjust the focus volume 1 and 2 (HDK 1 and 2) for the optimum focus.

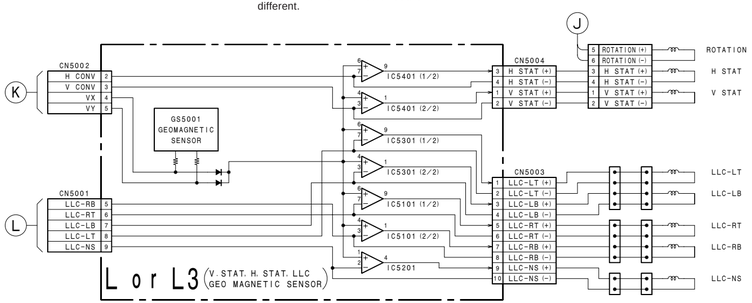


SECTION 5
DIAGRAMS

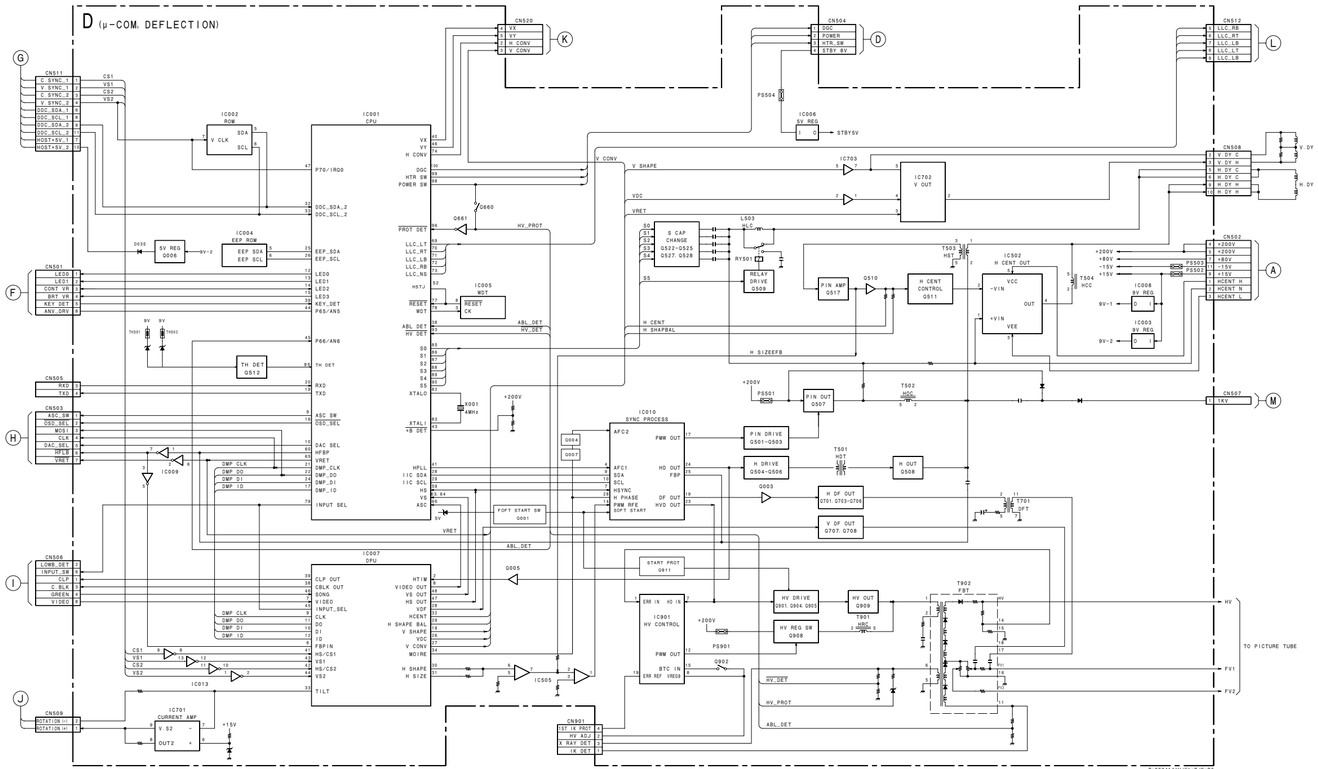
5-1. BLOCK DIAGRAMS

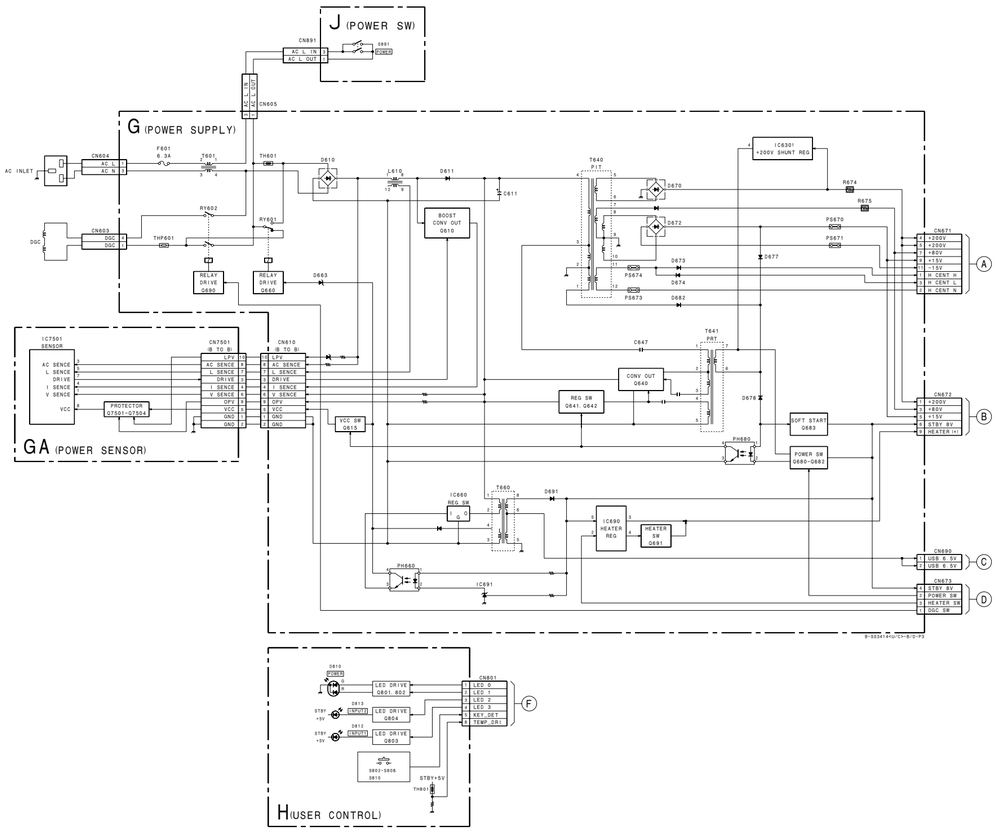


Note: A complete board and A3 complete board have interchangeability though it is a little different because the material of the circuit board is different.



Note: L complete board and L3 complete board have interchangeability though it is a little different because the material of the circuit board is different.

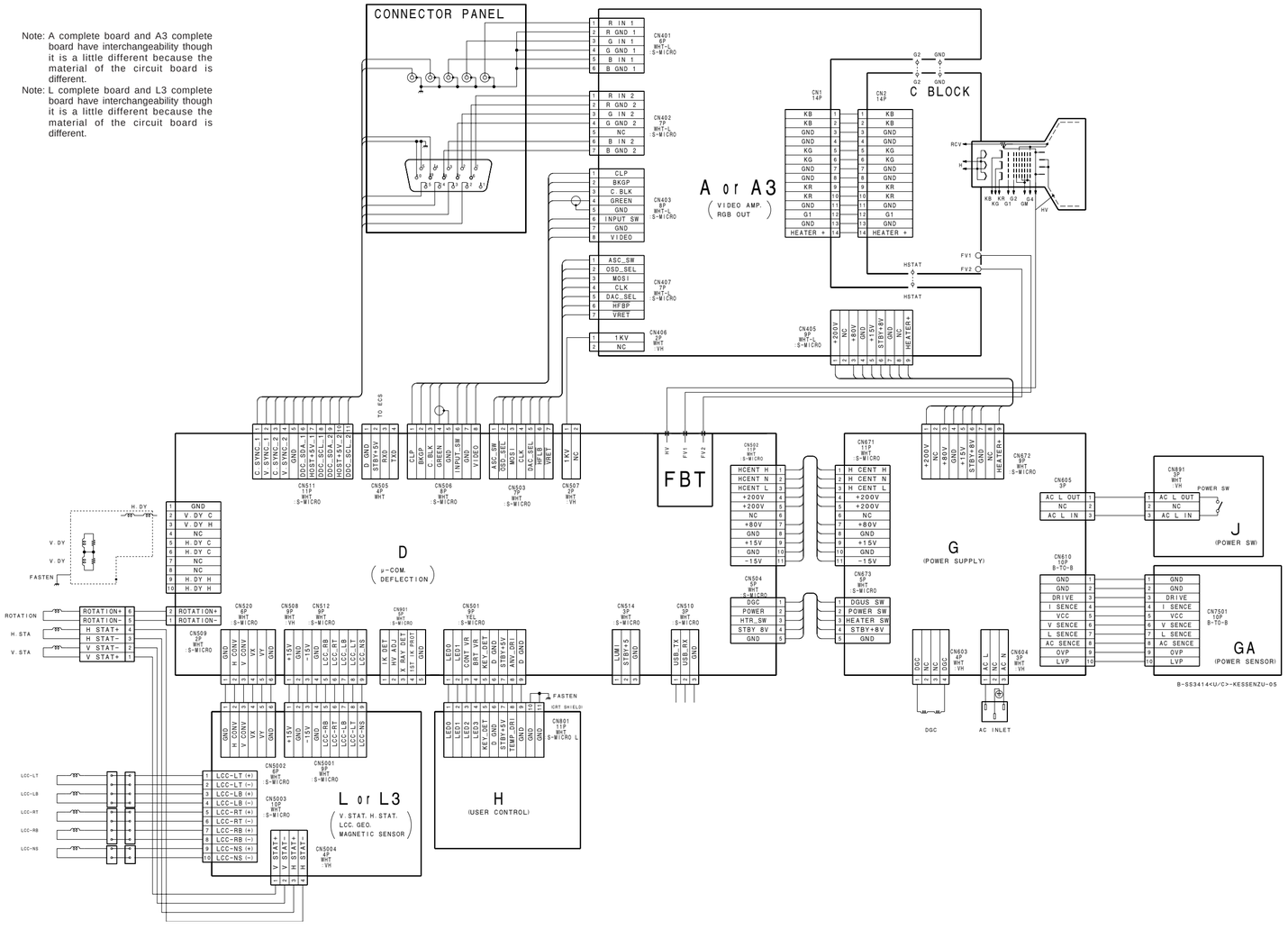

D (μ-COM, DEFLECTION)
IC001 CPU
IC002 ROM
IC004 EEP ROM
IC005 WDT
IC007 DPU
IC009
IC010 SYNC PROCESS
IC013
IC701 CURRENT AMP
IC702 V OUT
IC703
IC901 HV CONTROL
IC502 H CENT OUT
IC503
CN501
CN502
CN503
CN504
CN505
CN506
CN507
CN508
CN509
CN511
CN512
CN520
S CAP CHANGE
RELAY DRIVE
PIN AMP
H CENT CONTROL
PIN OUT
PIN DRIVE
H DRIVE
H OUT
H DF OUT
V DF OUT
HV DRIVE
HV REG SW
HV OUT
START PROT
POFT START SW
TH DET
5V REG
8V REG
9V REG
TO PICTURE TUBE
B-5534141U/C5-B/D-P2


J (POWER SW)
G (POWER SUPPLY)
GA (POWER SENSOR)
H (USER CONTROL)
IC6301 +200V SHUNT REG
IC7501 SENSOR
PROTECTOR
BOOST CONV OUT
CONV OUT
REG SW
SOFT START
POWER SW
HEATER SW
B-5534141U/C5-B/D-P3

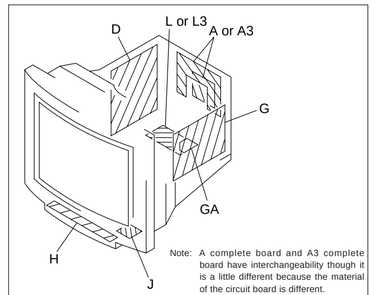
5-2. FRAME SCHEMATIC DIAGRAM

Note: A complete board and A3 complete board have interchangeability though it is a little different because the material of the circuit board is different.

Note: L complete board and L3 complete board have interchangeability though it is a little different because the material of the circuit board is different.



5-3. CIRCUIT BOARDS LOCATION



Note: A complete board and A3 complete board have interchangeability though it is a little different because the material of the circuit board is different.

Note: L complete board and L3 complete board have interchangeability though it is a little different because the material of the circuit board is different.

5-4. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

Note:

- All capacitors are in μF unless otherwise noted. (pF: μμF) Capacitors without voltage indication are all 50 V.
- Indication of resistance, which does not have one for rating electrical power, is as follows.

  Pitch: 5 mm
  Rating electrical power 1/4 W (CHIP : 1/10 W)

- All resistors are in ohms.
- : nonflammable resistor.
- : fusible resistor.
- : internal component.
- : panel designation, and adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- : earth-ground.
- : earth-chassis.
- The components identified by ⋈ in this basic schematic diagram have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.
- When replacing components identified by ◪, make the necessary adjustments indicated. (See page 3-1)
- When replacing the part in below table, be sure to perform the related adjustment.

	Part replaced (◪)	
HV Regulator Circuit Check	D Board	IC901, T902 • Mounted D board
HV Protector Circuit Check	D Board	Q660, Q661, D916, D935, C924, R665, R667, R940, R980, T902 • Mounted D board
	G Board	PH680, Q680, Q683, D680, R680, R685, R686, R687, R688, R689 • Mounted G board
Beam Current Protector Circuit Check	D Board	IC901, D904, D907, D908, R011, R908, R909, R921, R925, R926, R929, R930, T902 • Mounted D board

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Note: Les composants identifiés par un tramé et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spècifié.

- All voltages are in V.
- Readings are taken with a 10 M digital multimeter.
- Readings are taken with a color-bar signal input.
- Voltage variations may be noted due to normal production tolerances.
- ∗ : Can not be measured.
- Circled numbers are waveform references.
- ▬▬ : B + bus.
- ▬ ▬ ▬ : B – bus.

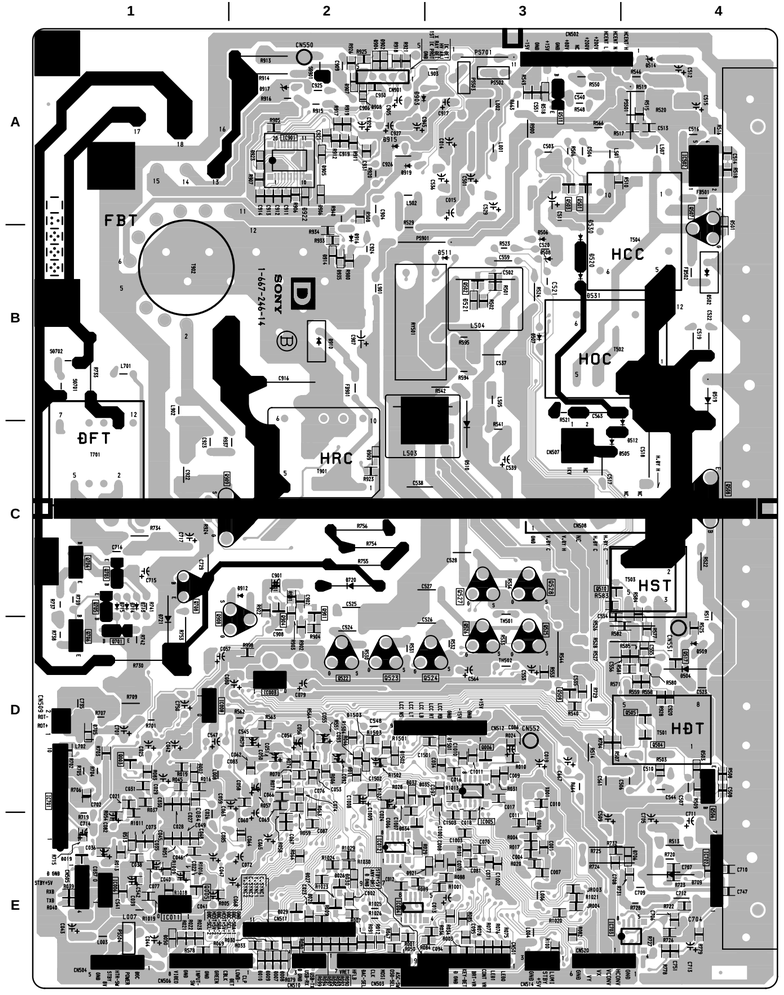
Terminal name of semiconductors in silk screen printed circuit (∗)

	Device	Printed symbol	Terminal name	Circuit
①	Transistor	T	Collector / Base / Emitter	
②	Transistor	▬	Collector / Base / Emitter	
③	Diode	⊓	Cathode / Anode	
④	Diode	T	Cathode / Anode (NC)	
⑤	Diode	▬	Cathode / Anode (NC)	
⑥	Diode	T	Common / Anode Cathode	
⑦	Diode	▬	Common / Anode Cathode	
⑧	Diode	T	Common / Anode Anode	
⑨	Diode	▬	Common / Anode Anode	
⑩	Diode	T	Common / Cathode Cathode	
⑪	Diode	▬	Common / Cathode Cathode	
⑫	Diode	▮	Anode Cathode / Anode Anode / Cathode Anode	
⑬	Transistor (FET)	▮	Drain Source / Gate	
⑭	Transistor (FET)	▮	Drain Source / Gate	
⑮	Transistor (FET)	▮	□ Source / □ Drain / □ Gate	
⑯	Transistor	▮	□ Emitter / □ Collector / □ Base	
–	Discrete semiconductot			

(Chip semiconductors that are not actually used are included.)

Ver.1.5

— D BOARD (Conductor Side) —



D µ-COM, DEFLECTION

• D BOARD SEMICONDUCTOR LOCATION

IC

	(Conductor Side)	(Component Side)
IC001		E–2
IC002		E–3
IC003	D–2	D–3
IC004	E–2	
IC005	D–3	
IC006	E–1	E–4
IC007		D–3
IC008	D–1	D–3
IC009		D–2
IC010		E–4
IC011	E–1	E–4
IC013		E–3
IC502	A–4	A–1
IC505		D–3
IC701	D–1	D–4
IC702	E–4	E–1
IC703	E–3	
IC901	A–2	

TRANSISTOR

	(Conductor Side)	(Component Side)	✻
Q001		D–4	②
Q003	D–1		①
Q004		D–4	②
Q005	E–1		①
Q006	D–3		①
Q007		D–4	②
Q501	A–3		①
Q502	B–3		①
Q503	A–3		①
Q504	D–4		①
Q505	D–4		①
Q506	D–4	D–1	–
Q507	A–4	A–1	–
Q508	C–4	C–1	–
Q509	D–3		①
Q510	C–3		①
Q511	A–3	A–2	–
Q512		D–2	②
Q517	D–4		①
Q522	D–2	D–3	–
Q523	D–2	D–2	–
Q524	D–3	D–2	–
Q525	D–3	D–2	–
Q526	D–3	D–2	–
Q527	C–3	C–2	–
Q528	C–3	C–2	–
Q660		D–2	②
Q661		D–2	②
Q701	D–1	D–4	–
Q703	C–1	C–4	–
Q704	C–1	C–4	–
Q705	C–1	C–4	–
Q706	D–1	D–4	–
Q707		D–3	②
Q708	C–1	C–3	–
Q901	C–2		①
Q902		A–3	②
Q904	C–2		①
Q905		C–3	②
Q908	D–2	D–3	–
Q909	C–2	C–3	–
Q911		D–3	②

DIODE

	(Conductor Side)	(Component Side)	✻
D004		E–2	⑦
D009	E–2		③
D010	E–2		③
D012		E–2	⑦
D013		E–2	⑦
D014		E–2	⑦
D015		E–2	⑦
D016		E–2	⑦
D019	E–1		⑥
D020		E–4	⑦
D025		D–4	③
D026	E–2		⑥
D027	E–2		⑥
D028	E–2		⑥
D029	E–2		⑥
D032	D–2		③
D033		E–2	③
D035	D–3		⑥
D050	E–1		⑤
D501	B–4		③
D502	B–4	B–1	–
D503	D–4		③
D504	D–4	D–1	–
D505	C–3	C–1	–
D506	B–3	B–2	–
D507	B–3	B–2	–
D508	B–3	B–2	–
D509	D–4	D–1	–
D510	C–3	C–2	–
D511	B–3	B–2	–
D512	C–4	C–1	–
D513	E–1		③
D514	A–4	A–1	–
D516		D–2	③
D517		D–2	③
D518	A–3		③
D519	B–4	B–1	–
D520	B–3	B–2	–
D521	B–3		③
D660		D–2	③
D701		D–4	③
D704		D–5	③
D705	D–1		③
D706	E–4		③
D709	E–4	E–1	–
D713	C–1	C–4	–
D714	C–1	C–4	–
D715	C–1	C–4	–
D718		D–4	③
D720	C–2	C–3	–
D721	D–1	D–4	–
D901		C–3	③
D902	A–2		③
D903	A–2	A–2	–
D904	A–2		③
D905	A–2		③
D906	A–2		③
D907	A–2		③
D908	A–2		③
D909	C–2		③
D910	B–2	B–3	–
D911		C–3	③
D913		A–3	③
D915	A–2	A–2	–
D916	B–2	B–3	–
D917	A–2	A–3	–
D919	A–2	A–2	–
D921	E–3		③
D922	A–2		③
D923	A–2		③
D924		E–2	③
D935	B–2		③
D1501	D–3		③
D1502	D–2		③
D1503	D–2		③

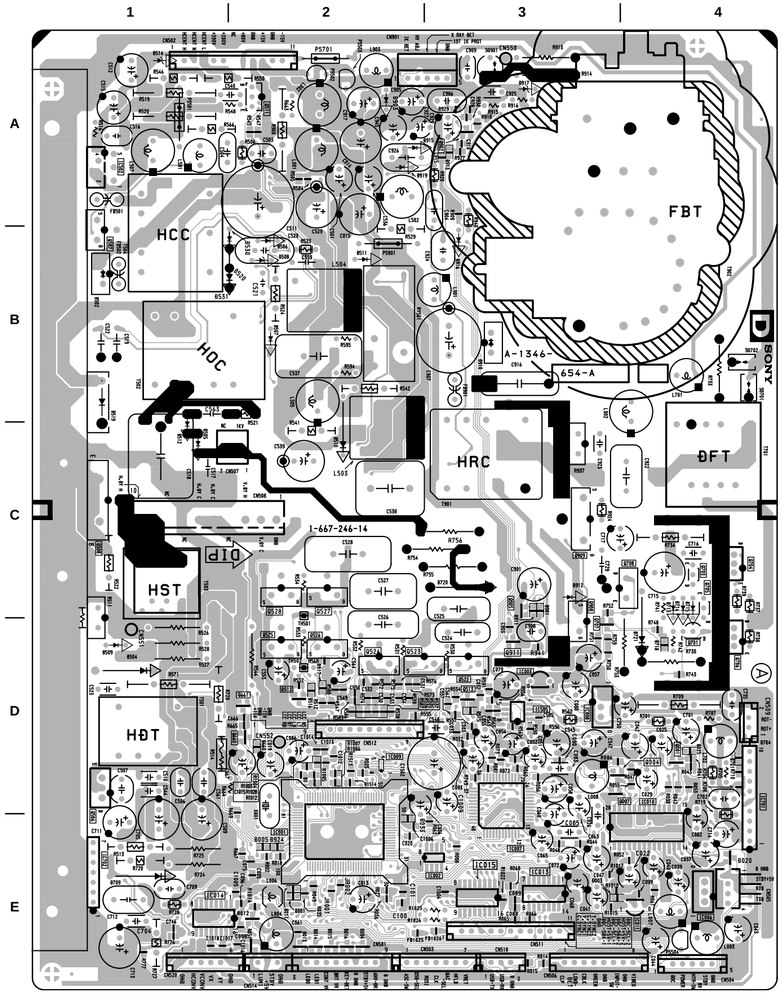
CRYSTAL

	(Conductor Side)	(Component Side)
X001	D–3	D–2

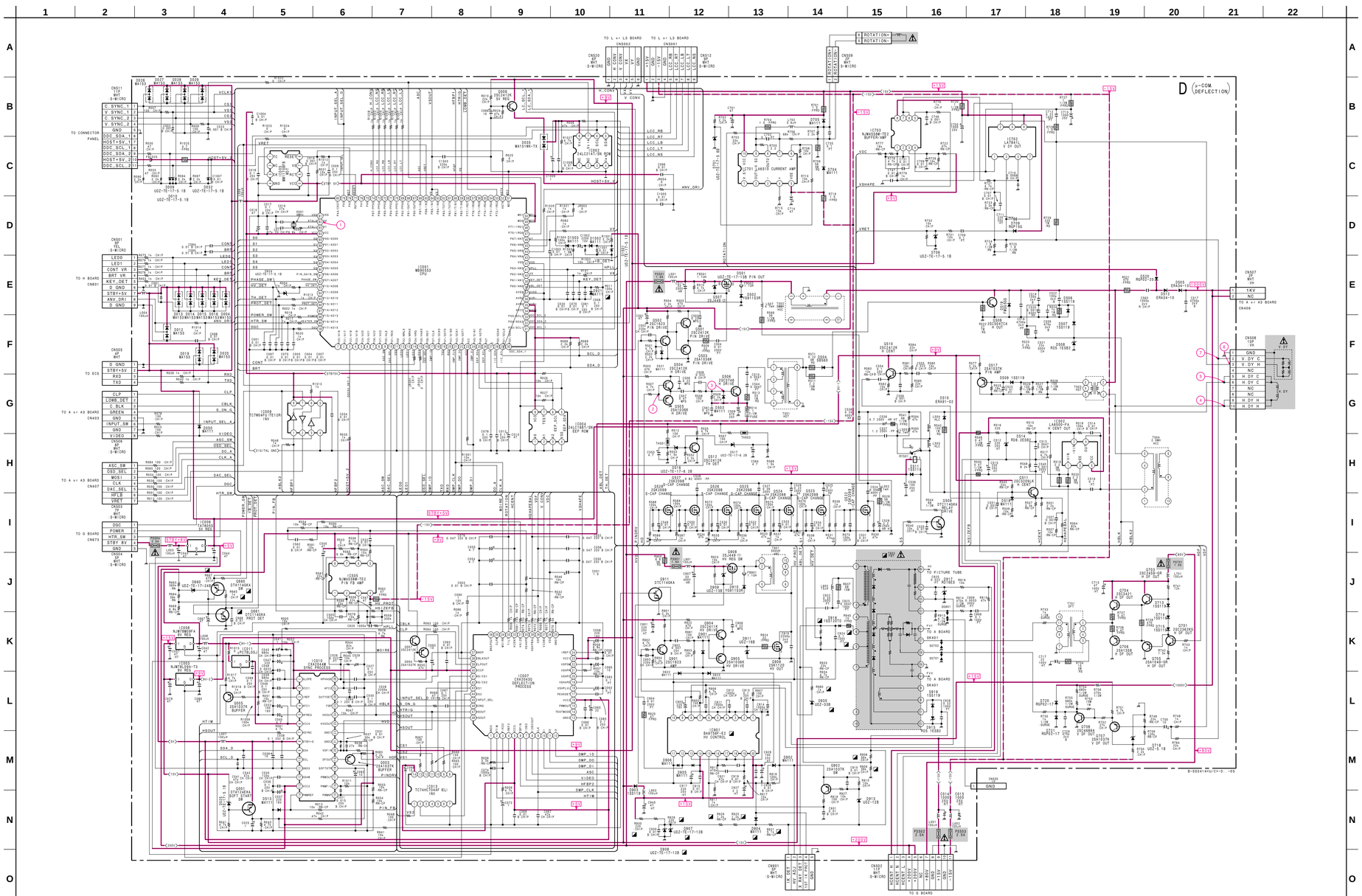
✻: Refer to Terminal name of semiconductors in silk screen printed circuit (see page 5-9)

NOTE:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

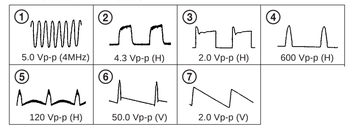
— D BOARD (Component Side) —



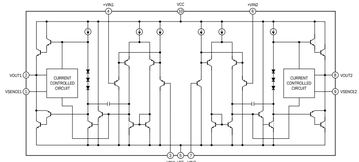
(1) Schematic Diagram of D Board



• D BOARD WAVEFORMS

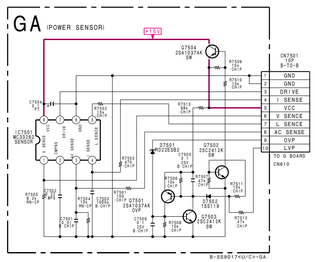


• D BOARD IC701 LA6510



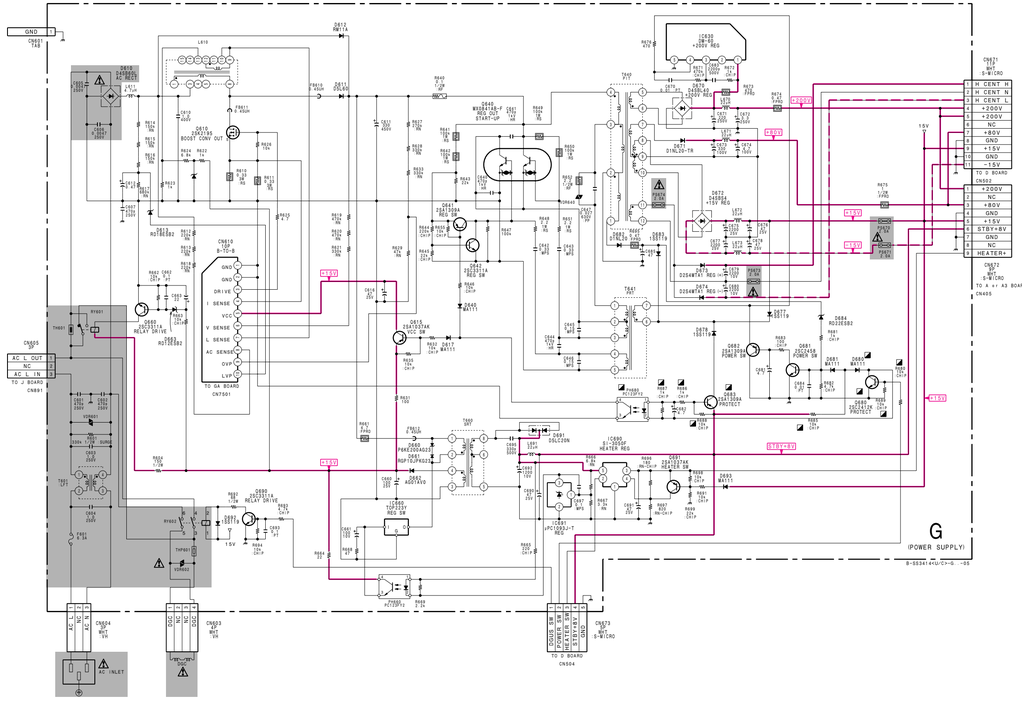
• D BOARD VOLTAGE LIST

Ref.	Pin No.	Voltage [V]	Ref.	Pin No.	Voltage [V]
IC002	5	1.1		11	0
	6	4.2		12	11.2
	7	0		15	0
				16	8.4
IC004	5	4.8		19	9.2
	6	4.8			
			Q003	B	5.1
IC005	1	0.4		C	0
	3	0		E	5.7
	7	1.5			
	8	4.8	Q005	B	2.5
				C	0
IC009	1	–0.1		E	3.1
	2	4.7			
	3	4.5	Q501	B	11.2
	5	0.3		C	13.8
	6	0.3		E	10.8
	7	4.5			
			Q502	B	0.2
IC010	1	4.0		C	11.2
	3	3.0			
	4	2.8	Q503	B	11.2
	5	2.3		E	10.9
	6	2.6			
	7	0.6	Q504	B	2.5
	9	4.8		C	12.0
	10	4.8		E	2.5
	12	5.4			
	14	4.5	Q505	B	2.5
	15	4.5		E	2.4
	16	5.4			
	17	1.0	Q506	B	–14.0
	18	0		C	–0.2
	19	5.1		E	–14.0
	20	3.7			
	23	0.8	Q507	G	197.4
	24	2.5		D	41.8
	25	–0.1			
	26	4.0	Q508	B	–1.4
	27	4.8		C	41.0
	28	4.4			
			Q509	B	0
IC012	5	0.6		C	14.1
	6	3.9			
	7	4.1	Q510	B	4.5
				E	3.9
IC013	1	0			
	2	4.9	Q511	B	3.2
	8	0.6		C	33.5
	9	3.6		E	2.6
	10	4.9			
	11	0	Q517	B	4.6
	13	5.7		E	5.1
IC014	1	3.5	Q522	G	0
	3	3.5		D	15.2
	5	2.7			
	9	0	Q523	G	4.7
	10	0.1		D	0
	12	4.9			
	13	4.9	Q524	G	4.7
	14	3.2		D	0
	15	3.9			
			Q525	G	4.7
IC015	1	0.5		D	0
	2	4.2			
	3	0.5	Q527	G	4.7
	4	0.5		D	0
	5	0			
	6	0	Q528	G	4.7
	8	0		D	0
	9	0			
	13	0	Q660	B	4.2
				C	0
IC502	1	41.4		E	4.2
	2	41.4			
	3	33.7	Q661	B	0
	4	42.3		C	4.2
	5	48.3			
			Q701	B	5.7
IC505	1	4.5		C	36.0
	2	0		E	5.1
	3	0			
	5	0	Q703	B	37.9
	6	0		E	37.4
	7	–10.0			
			Q704	B	37.4
IC701	1	14.2		E	37.0
	2	14.2			
	3	0	Q705	B	36.0
	4	3.6		E	36.6
	6	3.0			
	7	3.0	Q706	B	36.6
	8	–0.7		E	37.0
	9	–0.7			
			Q707	B	–0.6
IC702	2	0.4		C	–5.0
	3	13.5		E	0
	4	1.2			
	5	1.2	Q708	B	0.6
	7	–13.0		C	477.0
IC703	1	1.2	Q901	B	0.1
	2	1.6		C	9.9
	3	1.6			
	5	2.8	Q902	B	9.0
	6	2.8		C	0
	7	2.8		E	9.0
IC901	1	9.3	Q904	B	8.6
	2	5.6		C	13.0
	4	5.0		E	8.4
	6	1.1			
	7	0.9	Q905	B	8.6
	8	9.3		E	8.4
	10	0			
			Q908	G	196.6
				D	40.1
			Q909	G	8.4
				D	40.4



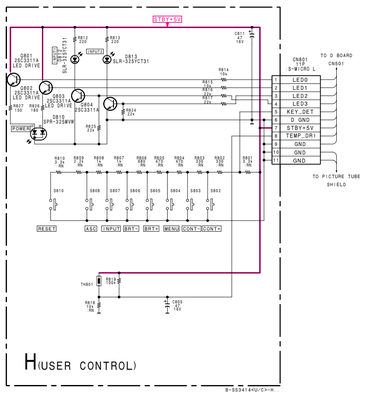
• GA BOARD VOLTAGE LIST

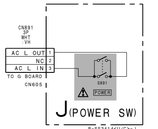
Ref.	Pin No.	Voltage [V]
IC7501	1	2.6
	2	2.5
	3	1.7
	4	0.2
	5	0
	7	8.6
Q7501	B	14.0
	C	0
	E	14.0
Q7502	B	0.7
	C	0.1
Q7503	B	0
	C	14.0
Q7504	B	13.4



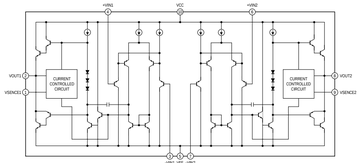
• G BOARD VOLTAGE LIST

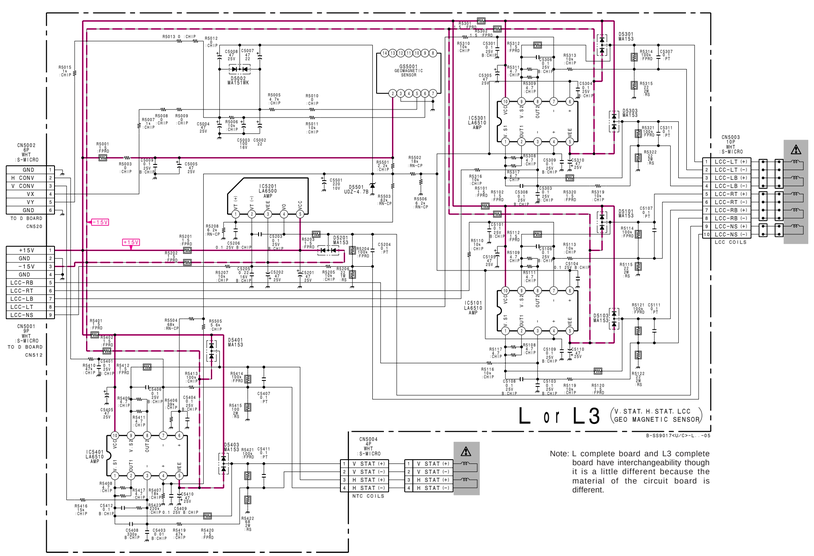
Ref.	Pin No.	Voltage [V]
IC630	3	2.5
	4	11.6
IC660	IN	6.1
	OUT	410.0
IC690	2	5.0
	3	6.7
	4	5.3
PH660	1	4.5
	2	3.3
	3	6.1
	4	16.7
PH680	1	1.3
	2	0.1
	3	0
	4	0.1
Q610	G	8.7
	D	102.4
	S	0.2
Q615	B	13.6
	C	14.2
	E	14.3
Q640	B1	–2.0
	C1	199.2
	B2	196.8
	C2	408.0
	E2	199.2
Q641	B	1.1
	C	–2.0
	E	2.0
Q642	B	–1.8
	C	–2.0
Q660	B	0.9
	C	0.3
Q680	B	0.8
	C	0
Q681	B	0.3
	C	11.7
Q682	B	11.7
	E	11.7
Q683	B	7.5
	C	8.3
Q690	B	0
	C	15.0
Q691	B	8.6
	C	5.3
	E	6.7





• L or L3 BOARD IC5101, 5301, 5401 LA6510





Note: L complete board and L3 complete board have interchangeability though it is a little different because the material of the circuit board is different.

• L or L3 BOARD VOLTAGE LIST

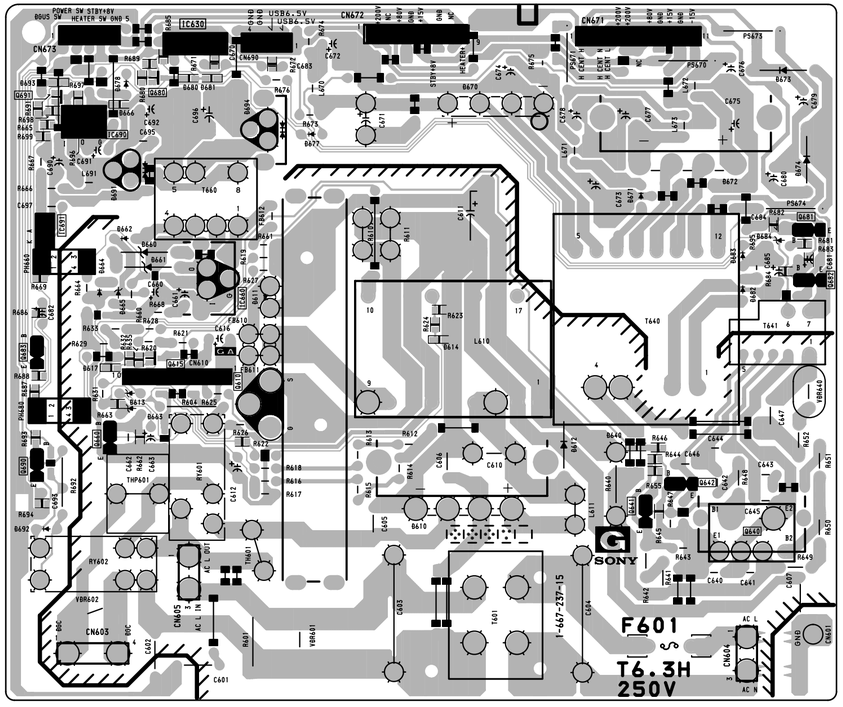
Ref.	Pin No.	Voltage [V]
GS5001	5	2.8
	6	2.8
IC5101	1	1.0
	2	1.0
	3	1.2
	4	1.2
	6	1.2
	7	1.2
	8	–0.2
	9	–0.2
IC5201	1	1.2
	2	1.2
	4	1.1
IC5301	1	–0.2
	2	–0.2
	3	1.2
	4	1.2
	6	1.2
	7	1.2
	8	0.4
	9	0.4
IC5401	1	0.6
	2	0.6
	3	3.4
	4	3.4
	6	1.8
	7	1.8
	8	0.4
	9	0.4

Schematic diagram
← D board

Schematic diagrams
G GA H
J L or L3 boards →

G [POWER SUPPLY] H [USER CONTROL]

— G BOARD —

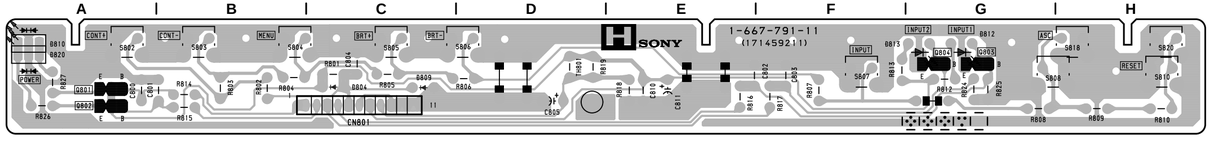


G BOARD
Terminal name of semiconductors in silk screen printed circuit (∗)

Ref.	∗
Q615, Q680, Q691	①
D614, D617, D640, D666, D680, D681, D693	③

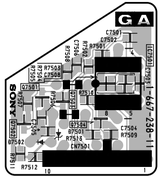
∗: Refer to Terminal name of semiconductors in silk screen printed circuit (see page 5-9)

— H BOARD —



GA [POWER SENSOR]

— GA BOARD —



GA BOARD
Terminal name of semiconductors in silk screen printed circuit (∗)

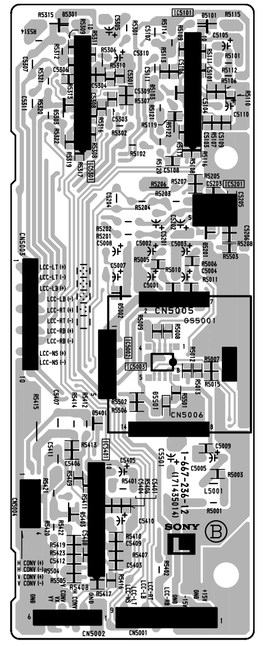
Ref.	∗
Q7501–Q7504	①

∗: Refer to Terminal name of semiconductors in silk screen printed circuit (see page 5-9)

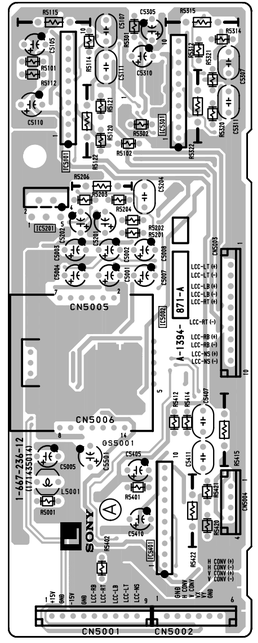
Note: L complete board and L3 complete board have interchangeability though it is a little different because the material of the circuit board is different.

L or L3 [V.STAT, H.STAT, LLC, GEO MAGNETIC SENSOR]

— L or L3 BOARD (Conductor Side) —



— L or L3 BOARD (Component Side) —



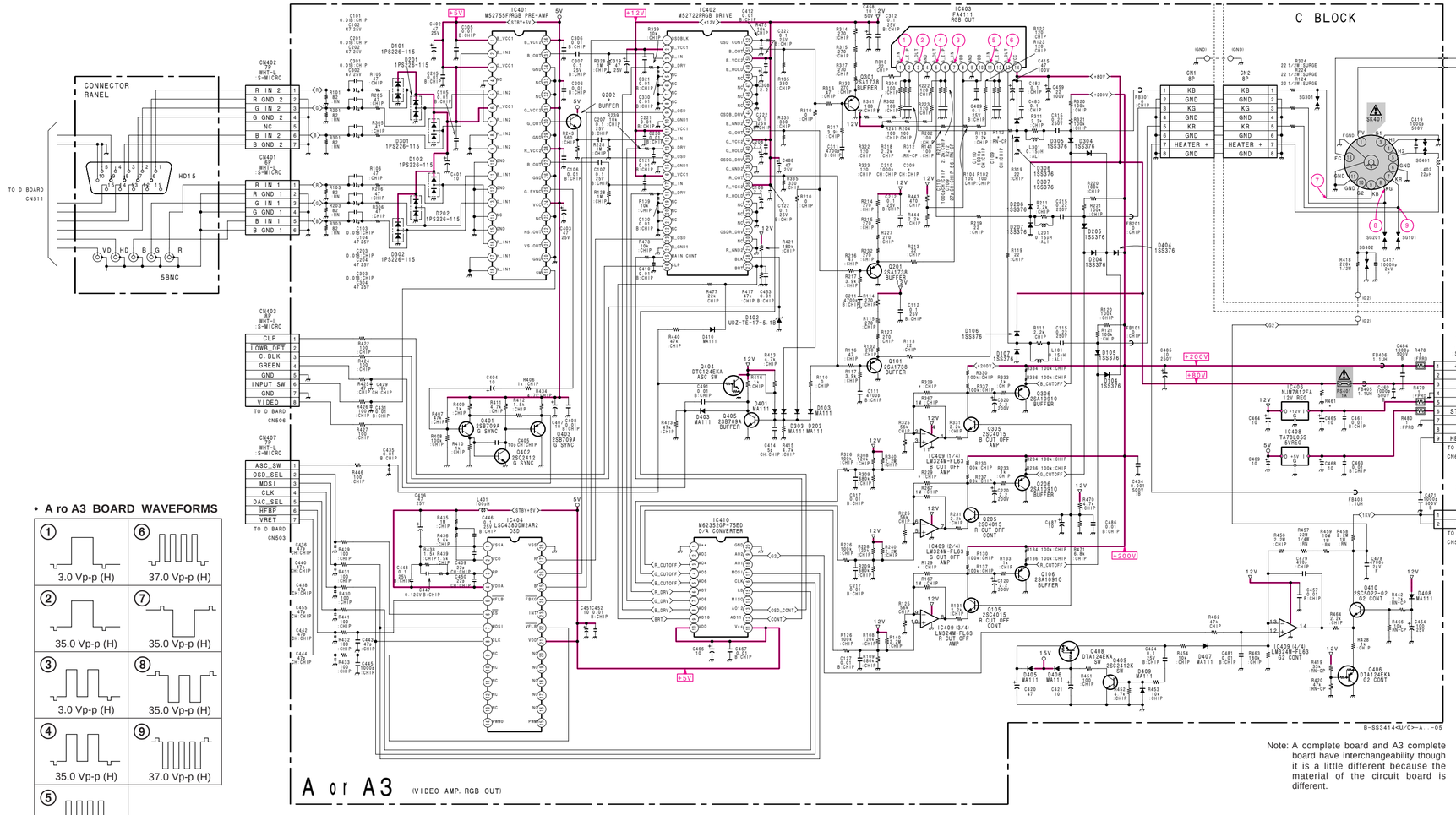
L or L3 BOARD
Terminal name of semiconductors in silk screen printed circuit (∗)

Ref.	∗
D5501	③
D5101, D5103, D5201, D5301, D5303, D5401, D5403	⑥
D5002	⑧

∗: Refer to Terminal name of semiconductors in silk screen printed circuit (see page 5-9)

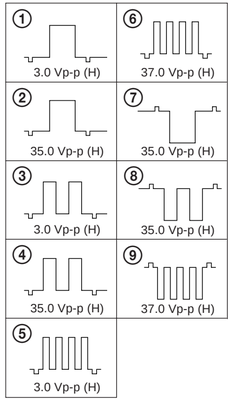
Schematic diagram
L or L3 board →

(3) Schematic Diagram of A or A3 Board



Note: A complete board and A3 complete board have interchangeability though it is a little different because the material of the circuit board is different.

• A ro A3 BOARD WAVEFORMS



• A or A3 BOARD * MARK LIST

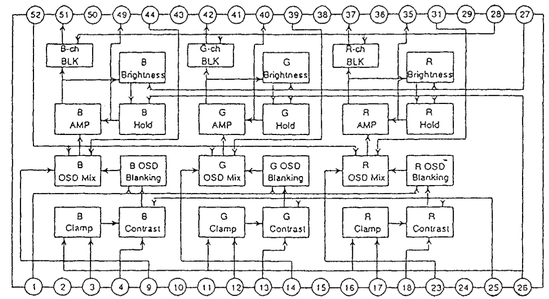
Ref. No.	A BOARD	A3 BOARD
C109	27pF CH:CHIP	33pF CH:CHIP
C113	100K :CHIP	#
C213	100K :CHIP	#
C309	27pF CH:CHIP	22pF CH:CHIP
C313	100K :CHIP	#
C413	100K :CHIP	#
JR401	#	0
JR402	#	0
JR403	#	0
JR404	#	0
Q202	2SC3545-T1T43T44	2SC2735JTL
R112	39 :RN-CP	56 :RN-CP
R129	1M :CHIP	560K :CHIP
R140	2.2M :CHIP	#
R145	#	470K :CHIP
R229	1M :CHIP	560K :CHIP
R240	2.2M :CHIP	#
R245	#	470K :CHIP
R312	68 :RN-CP	47 :RN-CP
R329	1M :CHIP	560K :CHIP
R340	2.2M :CHIP	#
R345	#	470K :CHIP
R461	100K 1/4W	100K 1/2W

: NOT USED

• A or A3 BOARD VOLTAGE LIST

Ref.	Pin No.	Voltage [V]	Ref.	Pin No.	Voltage [V]
IC402	1	1.1		E	6.8
	3	2.8	Q106	B	112.6
	4	3.7		E	113.3
	9	1.1	Q201	B	2.7
	12	2.8		E	3.5
	13	3.8	Q205	B	7.4
	14	1.1		C	109.9
	17	2.8		E	6.8
	18	3.9	Q206	B	109.9
	23	1.1		E	110.4
	25	3.3	Q301	B	2.7
	26	0.7		E	3.4
	27	2.4	Q305	B	7.4
	28	1.2		C	113.1
	35	4.4		E	6.8
	37	2.7	Q306	B	113.1
	40	4.4		E	113.7
	42	2.7	Q401	B	3.6
	49	4.4		C	0.7
	51	2.7		E	4.3
	52	2.1	Q406	B	7.9
IC403	1	3.4		E	9.0
	2	2.8	Q410	B	9.7
	3	53.6		C	484.0
	5	52.7		E	9.1
	6	2.9	SK401	KR	87.0
	7	3.4		KG	87.0
	8	9.8		KB	87.0
	10	9.8		G2	474.0
	11	3.5		H2	6.5
	12	2.9			
	13	52.3			
Q101	B	2.8			
	E	3.5			
Q105	B	7.3			
	C	112.6			

• A or A3 BOARD IC402 M52722P

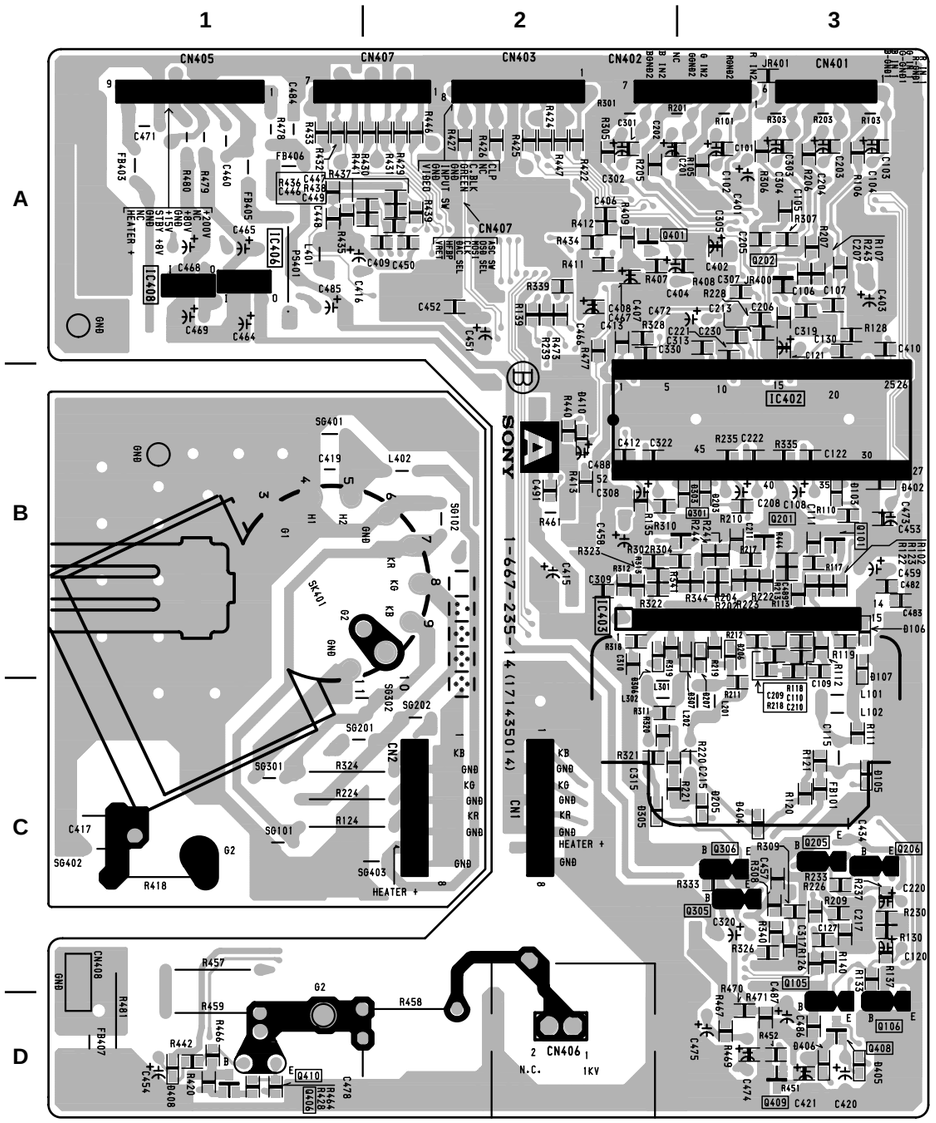


Note: A complete board and A3 complete board have interchangeability though it is a little different because the material of the circuit board is different.

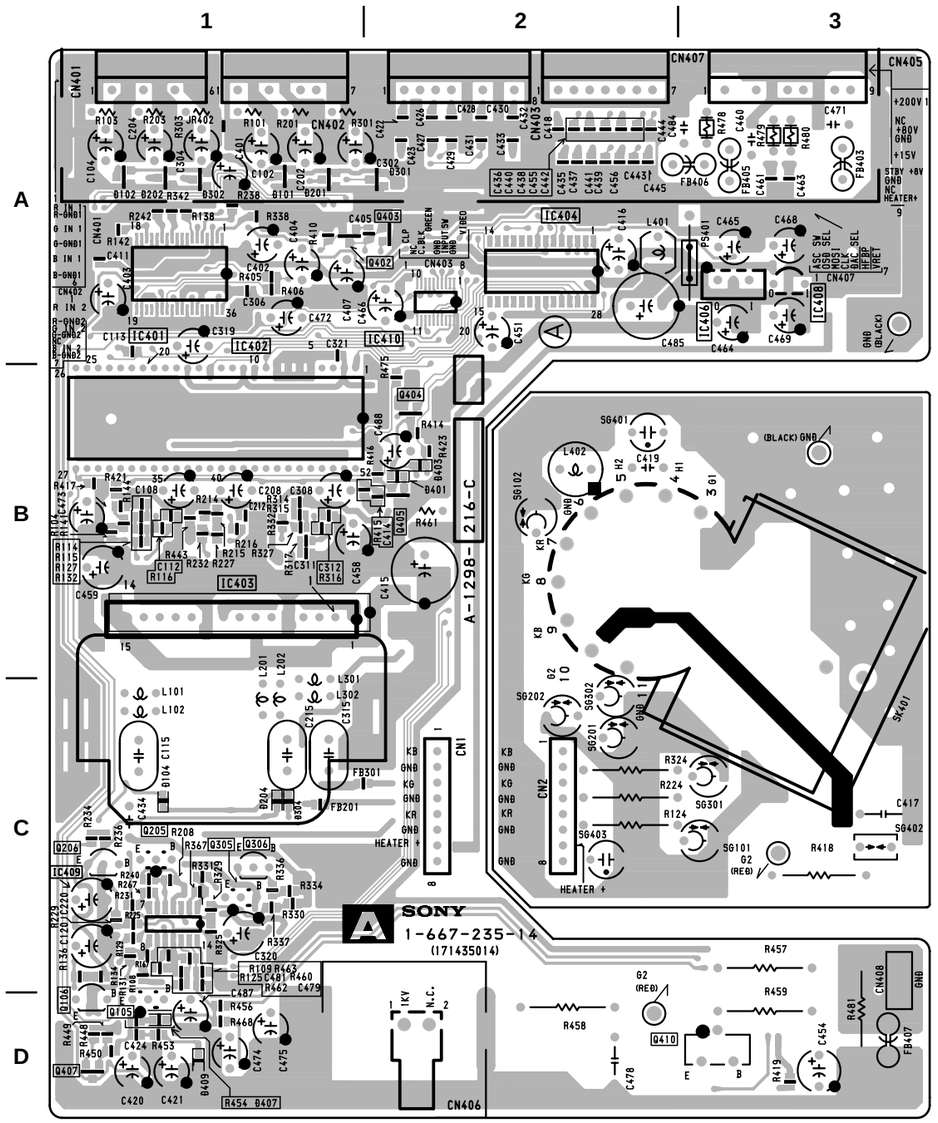
A or A3

[VIDEO AMP RGB OUT]

— A or A3 BOARD (Conductor Side) —



— A or A3 BOARD (Component Side) —



• A or A3 BOARD SEMICONDUCTOR LOCATION

IC

	(Conductor Side)	(Component Side)
IC401		A–1
IC402	B–3	B–1
IC403	B–3	B–1
IC404		A–2
IC406	A–1	A–3
IC408	A–1	A–3
IC409		C–1
IC410		A–2

TRANSISTOR

	(Conductor Side)	(Component Side)	∗
Q101	B–3		①
Q105	D–3	D–1	–
Q106	D–3	D–1	–
Q201	B–3		①
Q202	A–3		①
Q205	C–3	C–1	–
Q206	C–3	C–1	–
Q301	B–3		①
Q305	C–3	C–1	–
Q306	C–3	C–1	–
Q401	A–2		①
Q402		A–1	②
Q403		A–2	②
Q404		B–2	②
Q405		B–2	②
Q406	D–1		①
Q408	D–3		①
Q409	D–3		①
Q410	D–1	D–3	–

DIODE

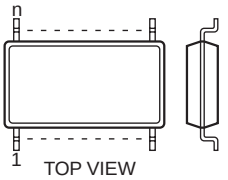
	(Conductor Side)	(Component Side)	∗
D101		A–1	⑦
D102		A–1	⑦
D103	B–3		③
D104		C–1	③
D105	C–3		③
D106	B–3		③
D107	B–3		③
D201		A–1	⑦
D202		A–1	⑦
D203	B–3		③
D204		C–1	③
D205	C–3		③
D206	B–3		③
D207	B–3		③
D301		A–2	⑦
D302		A–1	⑦
D303	B–3		③
D304		C–1	③
D305	C–2		③
D306	B–2		③
D307	B–3		③
D401		B–2	③
D402	B–3		③
D403		B–2	③
D404	C–3		③
D405	D–3		③
D406	D–3		③
D407		D–1	③
D408	D–1		③
D409		D–1	③
D410	B–2		③

∗: Refer to Terminal name of semiconductors in silk screen printed circuit (see page 5-9)

NOTE:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

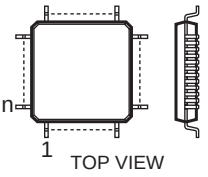
5-5. SEMICONDUCTORS

BA9756FS-E2
M62352GP-75E
M62352GP-75ED



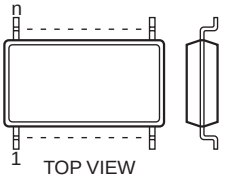
20 pin SOP

CXA2043Q



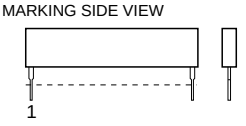
48 pin QFP

CXA2044M
LSC4380DW2AR2



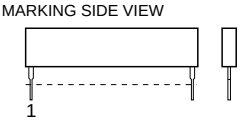
28 pin SOP

DM-60



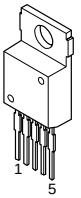
5 pin SIP

FA4111

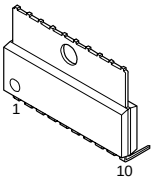


14 pin SIP

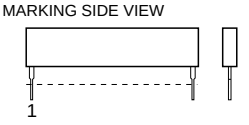
LA6500-FA



LA6510

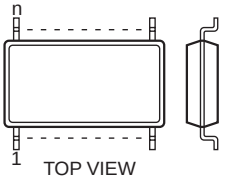


LA7841L



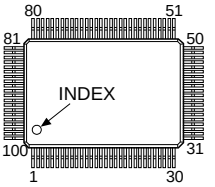
7 pin SIP

LM324M
TC74HCT04AF

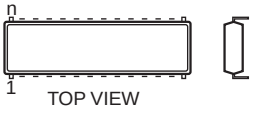


14 pin SOP

MB90553PF-G-120-BND

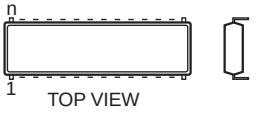


MC33262P
MM1170BFB



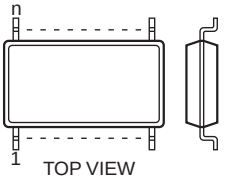
8 pin DIP

M52722P



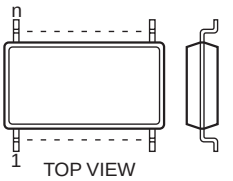
52 pin DIP

M52755FP



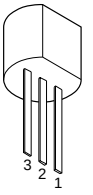
36 pin SOP

NJM4558M
TC7W04FU
µPC4558G2
24LC16BT/SN
24LC21AT/SN



8 pin SOP

NJM78L05A
NJM78L09A
TA78L05S
TA78L09S



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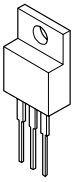
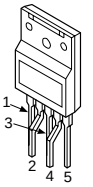
NJM7812FA
TA7805S



SI-3050F



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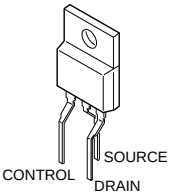

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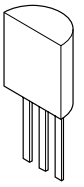

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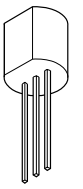

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DTA124EKA-T146
DTC114GKA
DTC114GKAT146
DTC124EK
DTC124EKA-T146
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2SA1036K-T-146-Q
2SA1037AK-T146-QR
2SA1037AK-T146-R
2SA1037K-T-146-QR
2SA1162G
2SA1462-Y33
2SA1738-TX
2SB709A-QRS-TX
2SC1623-L5L6
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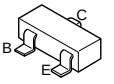

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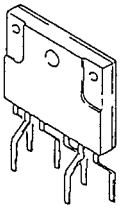

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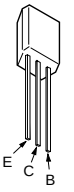

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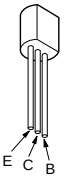

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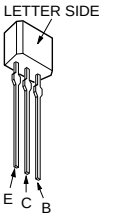

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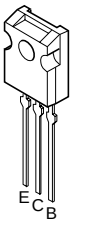

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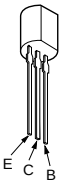

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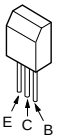

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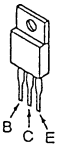
2SJ449
2SJ449 (1)
2SJ449 (2)



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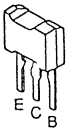

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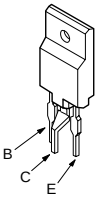

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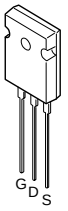
2SK2098-01MR



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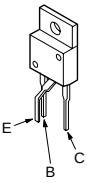
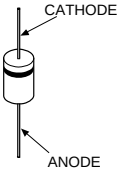
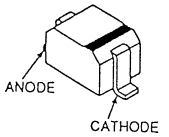


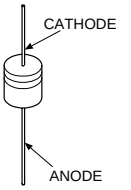
AG01A-V0
ERA91-02
S2LA20F



DTZ-TT11-16B
DTZ10B
DTZ13B
DTZ24B
DTZ33B
DTZ4.7C
DTZ5.1B
MA111-TX
RD12SB2
RD5.6SB
UDZ-TE-17-10B
UDZ-TE-17-12B
UDZ-TE-17-13B
UDZ-TE-17-16B
UDZ-TE-17-24B
UDZ-TE-17-33B
UDZ-TE-17-4.7B
UDZ-TE-17-5.1B
UDZ-TE-17-5.6B
UDZ-TE-17-6.2B



D1NL20-TR
GMA01
RD12ES-B2
RD16ES-B2
RD16ES-B3
RD18ES-B2
RD22ES-B2
RD5.1ES-B2
RD6.2ESB2
1SS119-25TD
1SS119-25
1SS120TD



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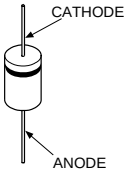
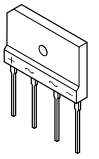
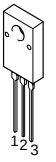
D2S4MTA1



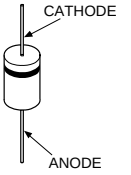
D4SBS4
D4SBS4-F
D4SBL40
D4SB60L



D5LC20U



EGP20G
ERA34-10
RGP02-17EL-6433
RGP02-17PKG23
RGP02-20EG23
RGP02-20EL-6394
RGP15GPKG23
UF4005PKG23



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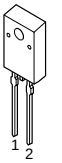
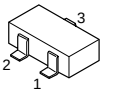
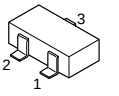
D5L60



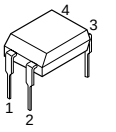
MA151WK
1SS184



MA153
1SS226



PC123F2
PC123FY2



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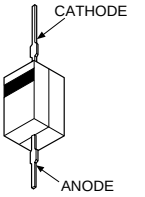
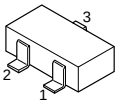
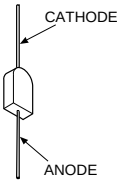


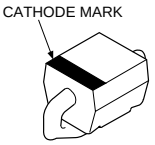
RD6.2M-B1



RM11A
RM11C



SB560



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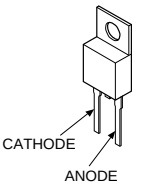
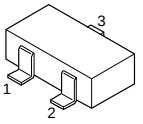


1PS226-115



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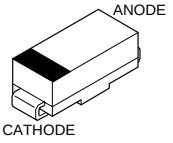


SECTION 6
EXPLODED VIEWS

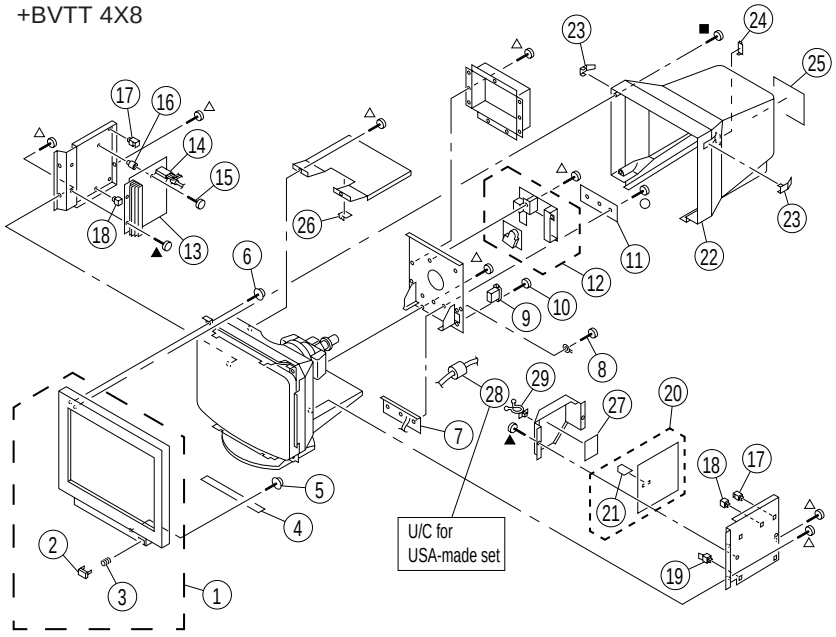
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifiés par un tramé et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

6-1. CHASSIS

▲ 7-685-647-79 +BVTP 3X10
■ 7-685-663-71 +BVTP 4X16
○ 7-685-872-09 +BVTT 3X8
△ 7-685-881-09 +BVTT 4X8



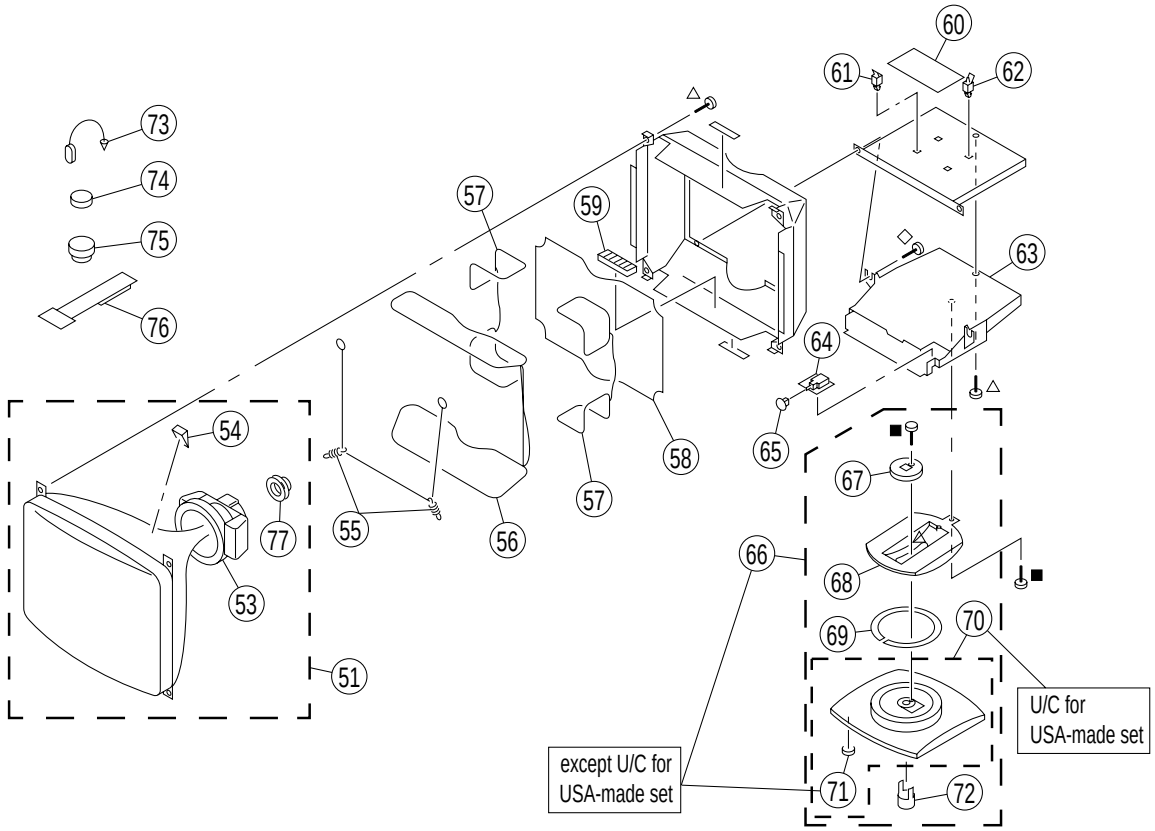
REF.NO.	PART NO.	DESCRIPTION	REMARK
1	X-4035-037-1	BEZEL ASSY [EQ,SH,U/C/AEP for Japan-made set]	2,3
1	X-4035-513-1	BEZEL ASSY [U/C for USA-made set]	2,3
1	X-4200-449-1	BEZEL ASSY [AEP for UK-made set]	2,3
2	4-061-598-01	BUTTON POWER [EQ,SH,U/C/AEP for Japan-made set]	
2	4-064-127-01	BUTTON POWER [U/C for USA-made set]	
2	4-204-321-01	BUTTON, POWER [AEP for UK-made set]	
3	4-042-593-01	SPRING, COMPRESSION [except U/C for USA-made set]	
3	4-042-593-11	SPRING, COMPRESSION [U/C for USA-made set]	
4	* 8-933-278-00	H BOARD, COMPLETE	
5	4-029-432-01	SCREW (3X12), (+) BVWHTP	
6	4-365-808-01	SCREW (5), TAPPING [except AEP for UK-made set]	
6	4-203-648-01	SCREW (5), SELF TAPPING [AEP for UK-made set]	
7	* 1-694-313-12	TERMINAL BOARD ASSY, I/O	
8	4-389-025-01	SCREW (M4) (EXT TOOTH WASHER)	
9	⚠ 1-251-382-12	INLET, AC 3P (WITH NOISE FILTER)	
10	4-052-345-01	SCREW, (3X8) (+K), TAPPING	
11	4-060-368-12	SHEET, CONNCETOR	
12	* 8-933-275-00	A BOARD, COMPLETE	
12	* 8-933-364-00	A3 BOARD, COMPLETE	
	Note: A complete board and A3 complete board have interchangeability though it is a little different because the material of the circuit board is different.		
13	* 8-933-276-00	D BOARD, COMPLETE	14
14	⚠ X-4035-170-1	TRANSFORMER ASSY, FLYBACK (NX-4142//J1D4)	
15	4-062-115-01	SCREW +P 3.5X20 TYPE2	
16	* 4-060-359-01	HOLDER, PRINTED CIRCUIT BOARD	
17	* 3-701-903-11	HOLDER, PRINTED CIRCUIT BOARD	
18	* 4-382-848-01	HOLDER, PRINTED CIRCUIT BOARD	
19	* 3-703-141-00	HOLDER, PRINTED CIRCUIT BOARD	
20	* 8-933-277-00	G BOARD, COMPLETE	21
21	* 8-933-269-00	GA BOARD, COMPLETE	
22	4-061-604-01	CABINET [EQ,SH,U/C/AEP for Japan-made set]	
22	4-064-123-01	CABINET [U/C for USA-made set]	
22	4-204-317-31	CABINET [AEP for UK-made set]	
23	4-061-605-01	COVER, SCREW [EQ,SH,U/C/AEP for Japan-made set]	
23	4-064-132-01	COVER, SCREW [U/C for USA-made set]	
23	4-204-327-31	COVER, SCREW [AEP for UK-made set]	
24	4-060-358-21	COVER, ECS [EQ,SH,U/C/AEP for Japan-made set]	
24	4-061-155-11	COVER, ECS [U/C for USA-made set]	
24	4-204-328-31	COVER, ECS [AEP for UK-made set]	
25	* 4-062-585-01	LABEL, INFORMATION [U/C for Japan-made set]	
25	* 4-062-586-01	LABEL, INFORMATION [500PST AEP for Japan-made set]	
25	* 4-064-134-01	LABEL, INFORMATION [U/C for USA-made set]	
25	* 4-064-599-01	LABEL, INFORMATION [EQ]	
25	* 4-064-598-01	LABEL, INFORMATION [SH]	
25	* 4-204-329-02	LABEL, INFORMATION [500PST AEP for UK-made set]	
25	* 4-204-840-01	LABEL, INFORMATION [500PST9 AEP for UK-made set]	
25	4-070-098-01	LABEL, INFORMATION [500PST9 AEP for Japan-made set]	
26	* 4-063-711-01	SUPPORT, HV CABLE	
27	* 4-061-694-01	SHEET, INSULATE	
28	1-543-793-11	FITER, CLAMP (FERRITE CORE) [U/C for USA-made set]	
29	2-132-434-01	CLIP, WIRE	

6-2. PICTURE TUBE

■ 7-685-663-71 +BVTP 4X16
△ 7-685-881-09 +BVTT 4X8
◇ 7-685-883-01 +BVTT 4X12

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifiés par un tramé et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

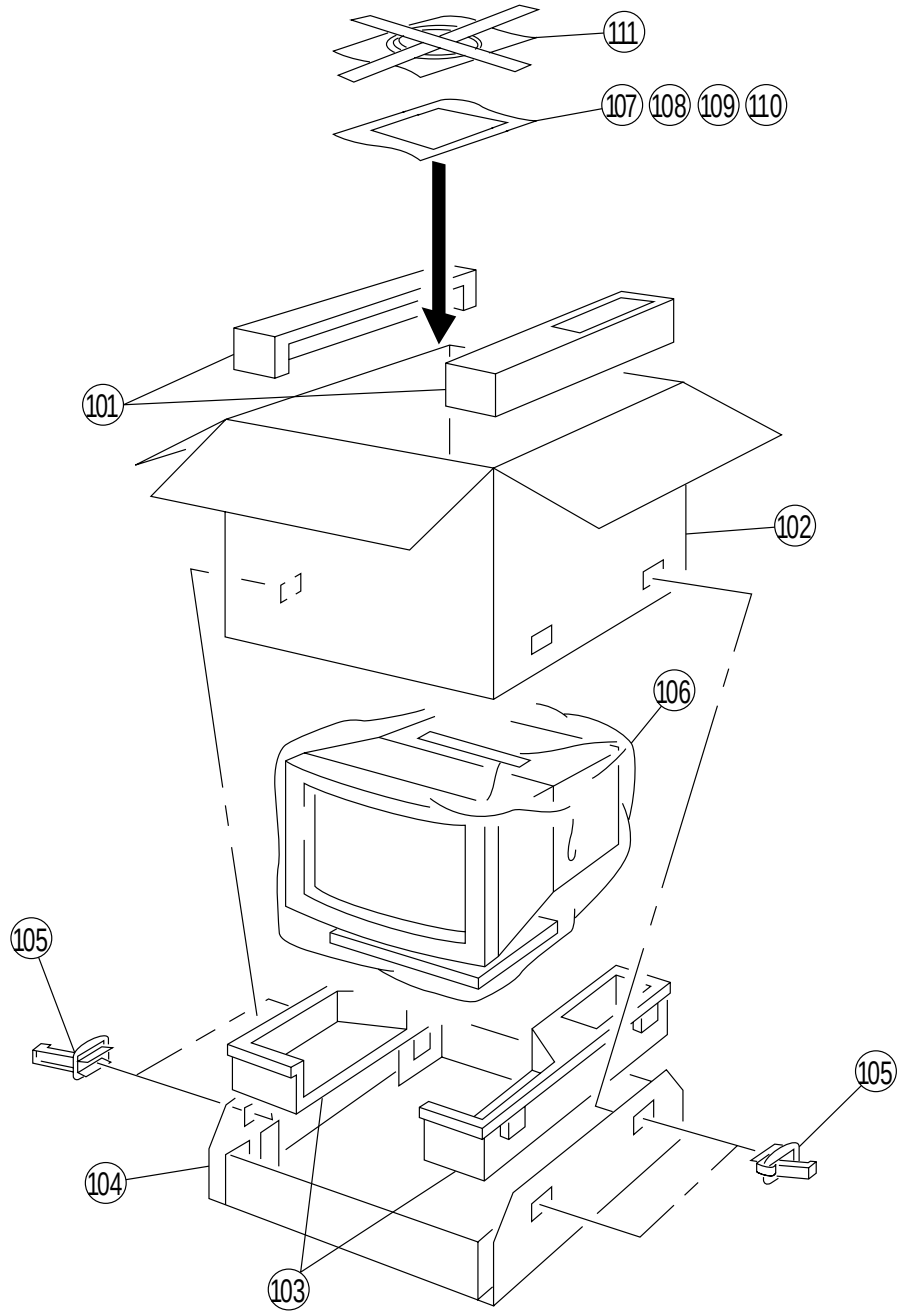


REF.NO.	PART NO.	DESCRIPTION	REMARK
51	⚠ 8-738-796-81	ITC (21SRG-R2) [U/C, AEP]	53,54,77
51	⚠ 8-738-799-91	ITC (21SRG-RS2) [EQ, SH]	53,54,77
53	⚠ 8-451-493-41	DEFLECTION YOKE (Y21SRL-M4) [AEP for UK-made set]	
53	⚠ 1-451-479-11	DEFLECTION YOKE (Y21SRL2-T) [EQ,SH,U/C/AEP for Japan-made set]	
53	⚠ 8-451-493-71	DEFLECTION YOKE (Y21SRL-X) [U/C for USA-made set]	
54	4-040-897-01	SPACER, DEFLECTION YOKE [U/C for USA-made set]	
54	4-050-492-01	SPACER, DEFLECTION YOKE [except U/C for USA-made set]	
55	* 4-047-316-01	SPRING, EXTENSION [except U/C for USA-made set]	
55	* 4-061-573-01	SPRING, TENSION [U/C for USA-made set]	
56	⚠ 1-416-437-31	COIL, DEMAGNETIC	
57	⚠ 1-416-140-12	COIL, LANDING CORRECTION	
58	⚠ 1-416-438-31	COIL, LANDING CORRECTION	
59	4-062-670-01	SPACER, PICTURE TUBE	
60	* 8-933-263-00	L BOARD, COMPLETE	
60	* A-1394-929-A	L3 BOARD, COMPLETE	
		Note: L complete board and L3 complete board have interchangeability though it is a little different because the material of the circuit board is different.	
61	* 4-321-929-00	HOLDER, PRINTED CIRCUIT BOARD	
62	* 3-703-141-00	HOLDER, PRINTED CIRCUIT BOARD	
63	4-061-603-01	COVER, BOTTOM [EQ,SH,U/C/AEP for Japan-made set]	
63	4-064-124-01	COVER, BOTTOM [U/C for USA-made set]	
63	4-204-318-31	COVER, BOTTOM [AEP for UK-made set]	
64	* 8-933-279-00	J BOARD, COMPLETE	
65	4-031-646-01	SHAFT	
66	X-4035-224-1	STAND ASSY [EQ,SH,U/C/AEP for Japan-made set]	67-72
66	X-4036-734-1	STAND ASSY [500PST9 AEP for Japan-made set]	67-72
66	X-4200-492-1	STAND ASSY [AEP for UK-made set]	67-72
67	4-061-369-01	STOPPER (A) [EQ,SH,U/C/AEP for Japan-made set]	
67	4-064-133-01	STOPPER (A) [U/C for USA-made set]	
67	4-204-326-01	STOPPER (A) [AEP for UK-made set]	
68	4-061-938-01	SLIDER [EQ,SH,U/C/AEP for Japan-made set]	
68	4-064-125-01	SLIDER [U/C for USA-made set]	
68	4-070-626-01	SLIDER [500PST9 AEP for Japan-made set]	
68	* 4-204-319-31	SLIDER [AEP for UK-made set]	
69	4-063-397-01	RING, TILT SWIVEL [EQ,SH,U/C/AEP for Japan-made set]	
69	4-065-407-01	RING, TILT SWIVEL [U/C for USA-made set]	
69	* 4-204-376-01	RING, TILT SWIVEL [AEP for UK-made set]	
70	X-4035-515-1	STAND ASSY [U/C for USA-made set]	
71	4-047-474-01	FOOT, RUBBER [except U/C for USA-made set]	
72	4-041-621-21	STOPPER (B) [U/C for USA-made set]	
72	4-041-621-01	STOPPER (B) [except U/C for USA-made set]	
73	4-308-870-00	CLIP, LEAD WIRE	
74	1-452-032-00	MAGNET, DISK; 10mmϕ	
75	1-452-094-00	MAGNET, ROTATABLE DISK; 15mmϕ	
76	4-051-736-21	PIECE A (90), CONV. CORRECT	
77	⚠ 1-452-932-21	NECK ASSEMBLY (NA-2916)	

6-3. PACKING MATERIALS [EQ, SH model]

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifiés par un tramé et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

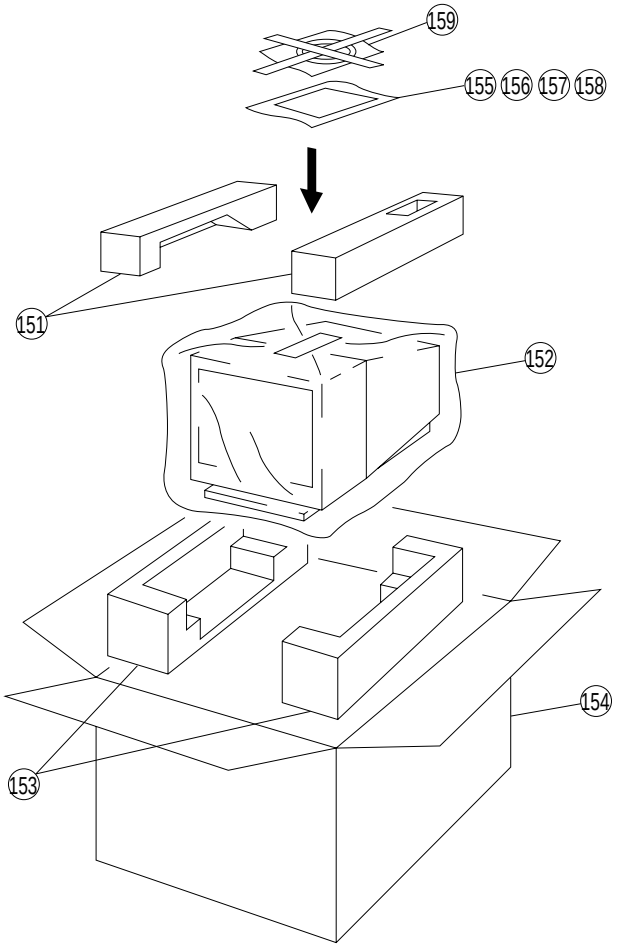


REF.NO.	PART NO.	DESCRIPTION	REMARK
101	*4-061-809-11	CUSHION (UPPER) (ASSY)	
102	*4-065-359-01	INDIVIDUAL CARTON	
103	*4-061-810-11	CUSHION (LOWER) (ASSY)	
104	*4-061-815-01	TRAY	
105	*4-396-077-01	JOINT	
106	*4-041-927-31	BAG, POLYETHYLENE	
107	⚠1-765-719-11	CORD SET, POWER (10A/250V) [EQ]	
107	⚠1-558-481-11	CORD SET, POWER (10A/250V) [SH]	
108	1-785-429-11	ADAPTOR, CONVERSION (for MAC)	
109	3-861-575-11	MANUAL, INSTRUCTION	
110	1-759-641-14	DISK, INFORMATION (for WINDOWS)	
111	1-790-901-11	CABLE ASSY (15P DSUBX2 CONNECTET)	

6-4. PACKING MATERIALS [U/C, AEP model]

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifiés par un tramé et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.



REF.NO.	PART NO.	DESCRIPTION	REMARK
151	*4-061-809-11	CUSHION (UPPER) (ASSY)	[U/C for Japan-made set, AEP for Japan-made set]
151	*4-064-179-01	CUSHION (UPPER) (ASSY)	[U/C for USA-made set]
151	*4-065-348-01	CUSHION (UPPER) (ASSY)	[AEP for UK-made set]
152	*4-041-927-31	BAG, POLYETHYLENE	[U/C for Japan-made set, AEP for Japan-made set]
152	*4-047-293-01	BAG, POLYETHYLENE [U/C for USA-made set]	
152	*4-060-490-11	BAG, POLYETHYLENE [AEP for UK-made set]	
153	*4-061-810-11	CUSHIN (LOWER) (ASSY)	[U/C for Japan-made set, AEP for Japan-made set]
153	*4-065-349-01	CUSHIN (LOWER) (ASSY)	[AEP for UK-made set]
153	*4-064-180-01	CUSHION (LOWER) (ASSY)	[U/C for USA-made set]
154	*4-061-808-02	INDIVIDUAL CARTON [U/C for Japan-made set]	
154	*4-061-663-01	INDIVIDUAL CARTON	[500PST AEP for Japan-made set]
154	*4-064-178-01	INDIVIDUAL CARTON [U/C for USA-made set]	
154	*4-070-185-01	INDIVIDUAL CARTON	[500PST9 AEP for Japan-made set]
154	*4-204-842-01	INDIVIDUAL CARTON	[500PST9 AEP for UK-made set]
154	*4-065-347-01	INDIVIDUAL CARTON	[500PST AEP for UK-made set]
155	3-861-575-11	MANUAL, INSTRUCTION	[U/C for Japan-made set]
155	3-861-575-21	MANUAL, INSTRUCTION [U/C for USA-made set]	
155	3-861-576-11	MANUAL, INSTRUCTION	[500PST AEP for Japan-made set]
155	3-861-576-31	MANUAL, INSTRUCTION	[500PST AEP for UK-made set]
155	3-861-576-41	MANUAL, INSTRUCTION [500PST9 AEP]	
156	⚠1-765-718-11	CORD SET, POWER (10A/125V) [U/C]	
156	⚠1-765-719-11	CORD SET, POWER (10A/250V)	[AEP for Japan-made set]
156	⚠1-790-714-11	CORD SET, POWER (10A/250V)	[AEP for UK-made set]
157	1-785-429-11	ADAPTOR, CONVERSION (for MAC)	
158	1-759-641-14	DISK, INFORMATION (for WINDOWS)	[except U/C for USA-made set]
158	1-759-641-21	DISK, INFORMATION (V 2.30) (for WINDOWS)	[U/C for USA-made set]
159	1-790-901-11	CABLE ASSY (15 DSUBX2 CONNECTET)	[U/C,AEP for Japan-made set]
159	1-790-212-11	CABLE ASSY [AEP for UK-made set]	

SECTION 7
ELECTRICAL PARTS LIST

A or A3

NOTE:

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifiés par un tramé et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

When indicating parts by reference number, please include the board name.

- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

RESISTORS
- All resistors are in ohms
- F : nonflammable

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

REF.NO.	PART NO.	DESCRIPTION			REMARK
	*8-933-275-00	A BOARD, COMPLETE			
	*8-933-364-00	A3 BOARD, COMPLETE			
		**********			
	Note: A complete board and A3 complete board have interchangeability though it is a little different because the material of the circuit board is different.				
	4-382-854-11	SCREW (M3X10), P, SW (+) (IC403)			
	<CAPACITOR>				
C101	1-163-021-91	CERAMIC CHIP	0.01µF	10% 50V	
C102	1-104-664-11	ELECT	47µF	20% 25V	
C103	1-163-021-91	CERAMIC CHIP	0.01µF	10% 50V	
C104	1-104-664-11	ELECT	47µF	20% 25V	
C105	1-163-021-91	CERAMIC CHIP	0.01µF	10% 50V	
C106	1-163-021-91	CERAMIC CHIP	0.01µF	10% 50V	
C107	1-164-004-11	CERAMIC CHIP	0.1µF	10% 25V	
C108	1-107-903-11	ELECT	2.2µF	20% 50V	
C109	1-163-237-11	CERAMIC CHIP	27pF	5% 50V	(A BOARD)
C109	1-163-239-11	CERAMIC CHIP	33pF	5% 50V	(A3 BOARD)
C110	1-163-275-11	CERAMIC CHIP	0.001µF	5% 50V	
C111	1-163-017-00	CERAMIC CHIP	0.0047µF	10% 50V	
C112	1-164-004-11	CERAMIC CHIP	0.1µF	10% 25V	
C113	1-216-097-91	RES, CHIP	100K	5% 1/10W	(A BOARD)
C115	1-104-514-11	FILM	0.22µF	10% 250V	
C120	1-107-949-11	ELECT	2.2µF	20% 200V	
C121	1-163-021-91	CERAMIC CHIP	0.01µF	10% 50V	
C122	1-164-004-11	CERAMIC CHIP	0.1µF	10% 25V	
C127	1-163-021-91	CERAMIC CHIP	0.01µF	10% 50V	
C130	1-163-021-91	CERAMIC CHIP	0.01µF	10% 50V	
C201	1-163-021-91	CERAMIC CHIP	0.01µF	10% 50V	
C202	1-104-664-11	ELECT	47µF	20% 25V	
C203	1-163-021-91	CERAMIC CHIP	0.01µF	10% 50V	
C204	1-104-664-11	ELECT	47µF	20% 25V	
C205	1-163-021-91	CERAMIC CHIP	0.01µF	10% 50V	
C206	1-163-021-91	CERAMIC CHIP	0.01µF	10% 50V	
C207	1-164-004-11	CERAMIC CHIP	0.1µF	10% 25V	
C208	1-107-903-11	ELECT	2.2µF	20% 50V	
C209	1-163-237-11	CERAMIC CHIP	27pF	5% 50V	
C210	1-163-275-11	CERAMIC CHIP	0.001µF	5% 50V	
C211	1-163-017-00	CERAMIC CHIP	0.0047µF	10% 50V	
C212	1-164-004-11	CERAMIC CHIP	0.1µF	10% 25V	
C213	1-216-097-91	RES, CHIP	100K	5% 1/10W	(A BOARD)
C215	1-104-514-11	FILM	0.22µF	10% 250V	
C217	1-163-021-91	CERAMIC CHIP	0.01µF	10% 50V	
C220	1-107-949-11	ELECT	2.2µF	20% 200V	
C221	1-163-021-91	CERAMIC CHIP	0.01µF	10% 50V	
C222	1-164-004-11	CERAMIC CHIP	0.1µF	10% 25V	
C230	1-163-021-91	CERAMIC CHIP	0.01µF	10% 50V	
C301	1-163-021-91	CERAMIC CHIP	0.01µF	10% 50V	
C302	1-104-664-11	ELECT	47µF	20% 25V	
C303	1-163-021-91	CERAMIC CHIP	0.01µF	10% 50V	
C304	1-104-664-11	ELECT	47µF	20% 25V	
C305	1-163-021-91	CERAMIC CHIP	0.01µF	10% 50V	
C306	1-163-021-91	CERAMIC CHIP	0.01µF	10% 50V	
C307	1-164-004-11	CERAMIC CHIP	0.1µF	10% 25V	
C308	1-107-903-11	ELECT	2.2µF	20% 50V	
C309	1-163-235-11	CERAMIC CHIP	22pF	5% 50V	(A BOARD)
C309	1-163-237-11	CERAMIC CHIP	27pF	5% 50V	(A3 BOARD)
C310	1-163-275-11	CERAMIC CHIP	0.001µF	5% 50V	
C311	1-163-017-00	CERAMIC CHIP	0.0047µF	10% 50V	
C312	1-164-004-11	CERAMIC CHIP	0.1µF	10% 25V	
C313	1-216-097-91	RES, CHIP	100K	5% 1/10W	(A BOARD)
C315	1-104-514-11	FILM	0.22µF	10% 250V	
C317	1-163-021-91	CERAMIC CHIP	0.01µF	10% 50V	
C319	1-107-888-11	ELECT	47µF	20% 25V	
C320	1-107-949-11	ELECT	2.2µF	20% 200V	
C321	1-163-021-91	CERAMIC CHIP	0.01µF	10% 50V	
C322	1-164-004-11	CERAMIC CHIP	0.1µF	10% 25V	
C330	1-163-021-91	CERAMIC CHIP	0.01µF	10% 50V	
C401	1-126-964-11	ELECT	10µF	20% 50V	
C402	1-104-664-11	ELECT	47µF	20% 25V	
C403	1-104-664-11	ELECT	47µF	20% 25V	
C404	1-126-964-11	ELECT	10µF	20% 50V	
C405	1-163-227-11	CERAMIC CHIP	10pF	0.5PF 50V	
C407	1-126-964-11	ELECT	10µF	20% 50V	
C408	1-163-021-91	CERAMIC CHIP	0.01µF	10% 50V	
C409	1-163-235-11	CERAMIC CHIP	22pF	5% 50V	
C410	1-163-021-91	CERAMIC CHIP	0.01µF	10% 50V	

A or A3

REF.NO.	PART NO.	DESCRIPTION			REMARK
C412	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C413	1-216-097-91	RES, CHIP	100K	5%	1/10W (A BOARD)
C414	1-163-222-11	CERAMIC CHIP	5pF	0.25pF	50V
C415	1-128-562-11	ELECT	47µF	20%	100V
C416	1-104-664-11	ELECT	47µF	20%	25V
C417	1-115-349-51	CERAMIC	0.01µF		2KV
C419	1-162-318-11	CERAMIC	0.001µF	10%	500V
C420	1-126-967-11	ELECT	47µF	20%	50V
C421	1-126-964-11	ELECT	10µF	20%	50V
C424	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C429	1-163-227-11	CERAMIC CHIP	10pF	0.5pF	50V
C431	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C434	1-162-318-11	CERAMIC	0.001µF	10%	500V
C435	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C436	1-163-243-11	CERAMIC CHIP	47pF	5%	50V
C438	1-163-243-11	CERAMIC CHIP	47pF	5%	50V
C440	1-163-243-11	CERAMIC CHIP	47pF	5%	50V
C442	1-163-243-11	CERAMIC CHIP	47pF	5%	50V
C443	1-163-243-11	CERAMIC CHIP	47pF	5%	50V
C444	1-163-243-11	CERAMIC CHIP	47pF	5%	50V
C445	1-163-009-11	CERAMIC CHIP	0.001µF	10%	50V
C446	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C447	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C448	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C450	1-163-235-11	CERAMIC CHIP	22pF	5%	50V
C451	1-126-964-11	ELECT	10µF	20%	50V
C452	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C453	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C454	1-104-665-11	ELECT	100µF	20%	25V
C455	1-163-243-11	CERAMIC CHIP	47pF	5%	50V
C457	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C458	1-126-964-11	ELECT	10µF	20%	50V
C459	1-107-930-91	ELECT	22µF	20%	100V
C460	1-162-318-11	CERAMIC	0.001µF	10%	500V
C461	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C463	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C464	1-107-906-11	ELECT	10µF	20%	50V
C465	1-107-906-11	ELECT	10µF	20%	50V
C466	1-126-964-11	ELECT	10µF	20%	50V
C467	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C468	1-126-964-11	ELECT	10µF	20%	50V
C469	1-126-964-11	ELECT	10µF	20%	50V
C471	1-162-318-11	CERAMIC	0.001µF	10%	500V
C478	1-115-350-51	CERAMIC	0.0047µF		2KV
C479	1-163-133-00	CERAMIC CHIP	470pF	5%	50V
C480	1-162-318-11	CERAMIC	0.001µF	10%	500V
C481	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C482	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C483	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C484	1-162-318-11	CERAMIC	0.001µF	10%	500V
C485	1-107-652-11	ELECT	10µF	20%	250V
C486	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C487	1-126-964-11	ELECT	10µF	20%	50V
C488	1-104-664-11	ELECT	47µF	20%	25V
C489	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C491	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V

<CONNECTOR>

CN401*	1-564-521-11	PLUG, CONNECTOR 6P	
CN402*	1-564-522-11	PLUG, CONNECTOR 7P	
CN403*	1-564-523-11	PLUG, CONNECTOR 8P	
CN405*	1-564-524-11	PLUG, CONNECTOR 9P	
CN406*	1-766-179-11	PIN, CONNECTOR (PC BOARD) 2P	
CN407*	1-564-522-11	PLUG, CONNECTOR 7P	

<DIODE>

D101	8-719-062-51	DIODE	1PS226-115
D102	8-719-062-51	DIODE	1PS226-115
D103	8-719-404-50	DIODE	MA111-TX
D104	8-719-052-12	DIODE	1SS376TE-17
D105	8-719-052-12	DIODE	1SS376TE-17
D106	8-719-052-12	DIODE	1SS376TE-17
D107	8-719-052-12	DIODE	1SS376TE-17
D201	8-719-062-51	DIODE	1PS226-115
D202	8-719-062-51	DIODE	1PS226-115
D203	8-719-404-50	DIODE	MA111-TX
D204	8-719-052-12	DIODE	1SS376TE-17
D205	8-719-052-12	DIODE	1SS376TE-17
D206	8-719-052-12	DIODE	1SS376TE-17
D207	8-719-052-12	DIODE	1SS376TE-17
D301	8-719-062-51	DIODE	1PS226-115
D302	8-719-062-51	DIODE	1PS226-115
D303	8-719-404-50	DIODE	MA111-TX
D304	8-719-052-12	DIODE	1SS376TE-17
D305	8-719-052-12	DIODE	1SS376TE-17
D306	8-719-052-12	DIODE	1SS376TE-17
D307	8-719-052-12	DIODE	1SS376TE-17
D401	8-719-404-50	DIODE	MA111-TX
D402	8-719-976-99	ZENER DIODE	DTZ5.1B
D403	8-719-404-50	DIODE	MA111-TX
D404	8-719-052-12	DIODE	1SS376TE-17
D405	8-719-404-50	DIODE	MA111-TX
D406	8-719-404-50	DIODE	MA111-TX
D407	8-719-404-50	DIODE	MA111-TX
D408	8-719-404-50	DIODE	MA111-TX
D409	8-719-404-50	DIODE	MA111-TX
D410	8-719-404-50	DIODE	MA111-TX

<FERRITE BEAD>

FB101	1-216-295-91	SHORT	0
FB201	1-216-295-91	SHORT	0
FB301	1-216-295-91	SHORT	0
FB403	1-412-911-31	FERRITE	1.1µH
FB405	1-412-911-31	FERRITE	1.1µH
FB406	1-412-911-31	FERRITE	1.1µH

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifiés par un tramé et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

A or A3

REF.NO.	PART NO.	DESCRIPTION	REMARK
		<IC>	
IC401	8-759-522-86	IC M52755FP-TP	
IC402	8-759-468-63	IC M52722P	
IC403	8-749-013-74	IC FA4111	
IC404	8-759-566-26	IC LSC4380DW2AR2	
IC406	8-759-701-79	IC NJM7812FA	
IC408	8-759-239-14	IC TA78L05S	
IC409	8-759-502-82	IC LM324M	
IC410	8-759-635-27	IC M62352GP-75E	
		<CHIP CONDUCTOR>	
JR401	1-216-295-91	SHORT	0 (A3 BOARD)
JR402	1-216-295-91	SHORT	0 (A3 BOARD)
JR403	1-216-295-91	SHORT	0 (A3 BOARD)
JR404	1-216-295-91	SHORT	0 (A3 BOARD)
		<COIL>	
L101	1-412-478-11	INDUCTOR	0.15µH
L201	1-412-478-11	INDUCTOR	0.15µH
L301	1-412-478-11	INDUCTOR	0.15µH
L401	1-408-615-31	INDUCTOR	100µH (A BOARD)
L401	1-414-940-21	INDUCTOR	100µH (A3 BOARD)
L402	1-412-529-11	INDUCTOR	22µH (A BOARD)
L402	1-414-742-21	INDUCTOR	22µH (A3 BOARD)
L403	1-412-963-11	INDUCTOR	100µH
		<IC LINK>	
PS401	⚠1-533-590-31	LINK, IC (1A/90V AC, 60V DC)	
		<TRANSISTOR>	
Q101	8-729-112-65	TRANSISTOR 2SA1462-Y33	
Q105	8-729-041-66	TRANSISTOR 2SC4015TV2	
Q106	8-729-200-17	TRANSISTOR 2SA1091-O	
Q201	8-729-112-65	TRANSISTOR 2SA1462-Y33	
Q202	8-729-107-31	TRANSISTOR 2SC3545-T43 (A BOARD)	
Q202	8-729-402-07	TRANSISTOR 2SC2735JTL (A3 BOARD)	
Q205	8-729-041-66	TRANSISTOR 2SC4015TV2	
Q206	8-729-200-17	TRANSISTOR 2SA1091-O	
Q301	8-729-112-65	TRANSISTOR 2SA1462-Y33	
Q305	8-729-041-66	TRANSISTOR 2SC4015TV2	
Q306	8-729-200-17	TRANSISTOR 2SA1091-O	
Q401	8-729-216-22	TRANSISTOR 2SA1162-G	
Q402	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q403	8-729-216-22	TRANSISTOR 2SA1162-G	
Q404	8-729-901-00	TRANSISTOR DTC124EK	
Q405	8-729-216-22	TRANSISTOR 2SA1162-G	
Q406	8-729-027-31	TRANSISTOR DTA124EKA-T146	
Q408	8-729-027-31	TRANSISTOR DTA124EKA-T146	
Q409	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q410	8-729-032-61	TRANSISTOR 2SC5022-02	

REF.NO.	PART NO.	DESCRIPTION			REMARK
		<RESISTOR>			
R101	1-215-395-00	METAL	82	1%	1/4W
R102	1-216-025-91	RES, CHIP	100	5%	1/10W
R103	1-215-395-00	METAL	82	1%	1/4W
R104	1-216-025-91	RES, CHIP	100	5%	1/10W
R105	1-216-017-91	RES, CHIP	47	5%	1/10W
R106	1-216-017-91	RES, CHIP	47	5%	1/10W
R108	1-216-099-00	RES, CHIP	120K	5%	1/10W
R109	1-216-117-00	RES, CHIP	680K	5%	1/10W
R110	1-216-295-91	SHORT	0		
R111	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R112	1-216-617-11	METAL CHIP	39	0.50%	1/10W (A BOARD)
R112	1-216-621-11	METAL CHIP	56	0.50%	1/10W (A3 BOARD)
R113	1-216-009-91	RES, CHIP	22	5%	1/10W
R114	1-216-035-00	RES, CHIP	270	5%	1/10W
R115	1-216-035-00	RES, CHIP	270	5%	1/10W
R116	1-216-017-91	RES, CHIP	47	5%	1/10W
R117	1-216-063-91	RES, CHIP	3.9K	5%	1/10W
R118	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R119	1-216-009-91	RES, CHIP	22	5%	1/10W
R120	1-216-097-91	RES, CHIP	100K	5%	1/10W
R121	1-216-097-91	RES, CHIP	100K	5%	1/10W
R122	1-216-027-00	RES, CHIP	120	5%	1/10W
R123	1-216-027-00	RES, CHIP	120	5%	1/10W
R124	1-219-497-11	CARBON	22	5%	1/2W
R125	1-216-091-00	RES, CHIP	56K	5%	1/10W
R126	1-216-097-91	RES, CHIP	100K	5%	1/10W
R127	1-216-035-00	RES, CHIP	270	5%	1/10W
R128	1-216-121-91	RES, CHIP	1M	5%	1/10W
R129	1-216-115-00	RES, CHIP	560K	5%	1/10W (A3 BOARD)
R129	1-216-121-91	RES, CHIP	1M	5%	1/10W (A BOARD)
R130	1-216-097-91	RES, CHIP	100K	5%	1/10W
R131	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R132	1-216-035-00	RES, CHIP	270	5%	1/10W
R133	1-216-049-91	RES, CHIP	1K	5%	1/10W
R134	1-216-097-91	RES, CHIP	100K	5%	1/10W
R135	1-216-037-00	RES, CHIP	330	5%	1/10W
R136	1-216-097-91	RES, CHIP	100K	5%	1/10W
R137	1-216-097-91	RES, CHIP	100K	5%	1/10W
R139	1-216-073-00	RES, CHIP	10K	5%	1/10W
R140	1-216-129-00	RES, CHIP	2.2M	5%	1/10W (A BOARD)
R141	1-216-025-91	RES, CHIP	100	5%	1/10W
R144	1-216-295-91	SHORT	0		
R145	1-216-113-00	RES, CHIP	470K	5%	1/10W (A3 BOARD)
R167	1-216-121-91	RES, CHIP	1M	5%	1/10W
R201	1-215-395-00	METAL	82	1%	1/4W
R202	1-216-025-91	RES, CHIP	100	5%	1/10W
R203	1-215-395-00	METAL	82	1%	1/4W
R204	1-216-025-91	RES, CHIP	100	5%	1/10W
R205	1-216-017-91	RES, CHIP	47	5%	1/10W
R206	1-216-017-91	RES, CHIP	47	5%	1/10W

A or A3

REF.NO.	PART NO.	DESCRIPTION		REMARK
R208	1-216-099-00	RES, CHIP	120K	5% 1/10W
R209	1-216-117-00	RES, CHIP	680K	5% 1/10W
R210	1-216-295-91	SHORT	0	
R211	1-216-057-00	RES, CHIP	2.2K	5% 1/10W
R212	1-216-621-11	METAL CHIP	56	0.50% 1/10W
R213	1-216-009-91	RES, CHIP	22	5% 1/10W
R214	1-216-035-00	RES, CHIP	270	5% 1/10W
R215	1-216-035-00	RES, CHIP	270	5% 1/10W
R216	1-216-017-91	RES, CHIP	47	5% 1/10W
R217	1-216-063-91	RES, CHIP	3.9K	5% 1/10W
R218	1-216-057-00	RES, CHIP	2.2K	5% 1/10W
R219	1-216-009-91	RES, CHIP	22	5% 1/10W
R220	1-216-097-91	RES, CHIP	100K	5% 1/10W
R221	1-216-097-91	RES, CHIP	100K	5% 1/10W
R222	1-216-027-00	RES, CHIP	120	5% 1/10W
R223	1-216-027-00	RES, CHIP	120	5% 1/10W
R224	1-219-497-11	CARBON	22	5% 1/2W
R225	1-216-091-00	RES, CHIP	56K	5% 1/10W
R226	1-216-097-91	RES, CHIP	100K	5% 1/10W
R227	1-216-035-00	RES, CHIP	270	5% 1/10W
R228	1-216-121-91	RES, CHIP	1M	5% 1/10W
R229	1-216-115-00	RES, CHIP	560K	5% 1/10W (A3 BOARD)
R229	1-218-121-91	RES, CHIP	1M	5% 1/10W (A BOARD)
R230	1-216-097-91	RES, CHIP	100K	5% 1/10W
R231	1-216-057-00	RES, CHIP	2.2K	5% 1/10W
R232	1-216-035-00	RES, CHIP	270	5% 1/10W
R233	1-216-049-91	RES, CHIP	1K	5% 1/10W
R234	1-216-097-91	RES, CHIP	100K	5% 1/10W
R235	1-216-037-00	RES, CHIP	330	5% 1/10W
R236	1-216-097-91	RES, CHIP	100K	5% 1/10W
R237	1-216-097-91	RES, CHIP	100K	5% 1/10W
R239	1-216-073-00	RES, CHIP	10K	5% 1/10W
R240	1-216-129-00	RES, CHIP	2.2M	5% 1/10W (A BOARD)
R241	1-216-025-91	RES, CHIP	100	5% 1/10W
R243	1-216-043-91	RES, CHIP	560	5% 1/10W
R244	1-216-295-91	SHORT	0	
R245	1-216-113-00	RES, CHIP	470K	5% 1/10W (A3 BOARD)
R267	1-216-121-91	RES, CHIP	1M	5% 1/10W
R301	1-215-395-00	METAL	82	1% 1/4W
R302	1-216-025-91	RES, CHIP	100	5% 1/10W
R303	1-215-395-00	METAL	82	1% 1/4W
R304	1-216-025-91	RES, CHIP	100	5% 1/10W
R305	1-216-017-91	RES, CHIP	47	5% 1/10W
R306	1-216-017-91	RES, CHIP	47	5% 1/10W
R308	1-216-099-00	RES, CHIP	120K	5% 1/10W
R309	1-216-117-00	RES, CHIP	680K	5% 1/10W
R310	1-216-295-91	SHORT	0	
R311	1-216-057-00	RES, CHIP	2.2K	5% 1/10W
R312	1-216-619-11	METAL CHIP	47	0.50% 1/10W (A3 BOARD)
R312	1-216-623-11	METAL CHIP	68	0.50% 1/10W (A BOARD)
R313	1-216-009-91	RES, CHIP	22	5% 1/10W
R314	1-216-035-00	RES, CHIP	270	5% 1/10W
R315	1-216-035-00	RES, CHIP	270	5% 1/10W
R316	1-216-017-91	RES, CHIP	47	5% 1/10W
R317	1-216-063-91	RES, CHIP	3.9K	5% 1/10W
R318	1-216-057-00	RES, CHIP	2.2K	5% 1/10W
R319	1-216-009-91	RES, CHIP	22	5% 1/10W
R320	1-216-097-91	RES, CHIP	100K	5% 1/10W
R321	1-216-097-91	RES, CHIP	100K	5% 1/10W
R322	1-216-027-00	RES, CHIP	120	5% 1/10W
R323	1-216-027-00	RES, CHIP	120	5% 1/10W
R324	1-219-497-11	CARBON	22	5% 1/2W
R325	1-216-091-00	RES, CHIP	56K	5% 1/10W
R326	1-216-097-91	RES, CHIP	100K	5% 1/10W
R327	1-216-035-00	RES, CHIP	270	5% 1/10W
R328	1-216-121-91	RES, CHIP	1M	5% 1/10W
R329	1-216-115-00	RES, CHIP	560K	5% 1/10W (A3 BOARD)
R329	1-216-121-91	RES, CHIP	1M	5% 1/10W (A BOARD)
R330	1-216-097-91	RES, CHIP	100K	5% 1/10W
R331	1-216-057-00	RES, CHIP	2.2K	5% 1/10W
R332	1-216-035-00	RES, CHIP	270	5% 1/10W
R333	1-216-049-91	RES, CHIP	1K	5% 1/10W
R334	1-216-097-91	RES, CHIP	100K	5% 1/10W
R335	1-216-037-00	RES, CHIP	330	5% 1/10W
R336	1-216-097-91	RES, CHIP	100K	5% 1/10W
R337	1-216-097-91	RES, CHIP	100K	5% 1/10W
R339	1-216-073-00	RES, CHIP	10K	5% 1/10W
R340	1-216-129-00	RES, CHIP	2.2M	5% 1/10W (A BOARD)
R341	1-216-025-91	RES, CHIP	100	5% 1/10W
R344	1-216-295-91	SHORT	0	
R345	1-216-113-00	RES, CHIP	470K	5% 1/10W (A3 BOARD)
R367	1-216-121-91	RES, CHIP	1M	5% 1/10W
R406	1-216-049-91	RES, CHIP	1K	5% 1/10W
R407	1-216-089-91	RES, CHIP	47K	5% 1/10W
R408	1-216-097-91	RES, CHIP	100K	5% 1/10W
R409	1-216-049-91	RES, CHIP	1K	5% 1/10W
R410	1-216-049-91	RES, CHIP	1K	5% 1/10W
R411	1-216-065-91	RES, CHIP	4.7K	5% 1/10W
R412	1-216-053-00	RES, CHIP	1.5K	5% 1/10W
R413	1-216-065-91	RES, CHIP	4.7K	5% 1/10W
R415	1-216-065-91	RES, CHIP	4.7K	5% 1/10W
R416	1-216-049-91	RES, CHIP	1K	5% 1/10W
R417	1-216-089-91	RES, CHIP	47K	5% 1/10W
R418	1-260-127-11	CARBON	220K	5% 1/2W
R419	1-216-687-11	METAL CHIP	33K	0.50% 1/10W
R420	1-216-691-11	METAL CHIP	47K	0.50% 1/10W
R421	1-216-103-00	RES, CHIP	180K	5% 1/10W
R422	1-216-025-91	RES, CHIP	100	5% 1/10W
R423	1-216-089-91	RES, CHIP	47K	5% 1/10W
R424	1-216-025-91	RES, CHIP	100	5% 1/10W
R425	1-216-017-91	RES, CHIP	47	5% 1/10W
R426	1-216-025-91	RES, CHIP	100	5% 1/10W
R427	1-216-025-91	RES, CHIP	100	5% 1/10W

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REF.NO.	PART NO.	DESCRIPTION			REMARK
R428	1-216-049-91	RES, CHIP	1K	5%	1/10W
R429	1-216-025-91	RES, CHIP	100	5%	1/10W
R430	1-216-025-91	RES, CHIP	100	5%	1/10W
R431	1-216-025-91	RES, CHIP	100	5%	1/10W
R432	1-216-025-91	RES, CHIP	100	5%	1/10W
R433	1-216-025-91	RES, CHIP	100	5%	1/10W
R434	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R435	1-216-121-91	RES, CHIP	1M	5%	1/10W
R436	1-216-067-00	RES, CHIP	5.6K	5%	1/10W
R438	1-216-053-00	RES, CHIP	1.5K	5%	1/10W
R439	1-216-053-00	RES, CHIP	1.5K	5%	1/10W
R440	1-216-089-91	RES, CHIP	47K	5%	1/10W
R441	1-216-025-91	RES, CHIP	100	5%	1/10W
R442	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R443	1-216-041-00	RES, CHIP	470	5%	1/10W
R444	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R446	1-216-025-91	RES, CHIP	100	5%	1/10W
R451	1-216-025-91	RES, CHIP	100	5%	1/10W
R452	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R453	1-216-073-00	RES, CHIP	10K	5%	1/10W
R454	1-216-073-00	RES, CHIP	10K	5%	1/10W
R456	1-216-129-00	RES, CHIP	2.2M	5%	1/10W
R457	1-219-621-91	METAL	22M	10%	1/4W
R458	1-211-885-21	METAL	2.2M	5%	1W
R459	1-219-720-11	METAL	10M	5%	1W
R461	1-249-441-11	CARBON	100K	5%	1/4W (A BOARD)
R461	1-260-123-11	CARBON	100K	5%	1/2W (A3 BOARD)
R462	1-216-089-91	RES, CHIP	47K	5%	1/10W
R463	1-216-103-00	RES, CHIP	180K	5%	1/10W
R464	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R466	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R470	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R471	1-216-069-00	RES, CHIP	6.8K	5%	1/10W
R473	1-216-073-00	RES, CHIP	10K	5%	1/10W
R475	1-216-073-00	RES, CHIP	10K	5%	1/10W
R477	1-216-081-00	RES, CHIP	22K	5%	1/10W
R478	1-249-381-11	CARBON	1	5%	1/4W F
R479	1-249-381-11	CARBON	1	5%	1/4W F
R480	1-249-381-11	CARBON	1	5%	1/4W F

<SPARK GAP>

SG101	1-517-499-21	GAP, SPARK			
SG201	1-517-499-21	GAP, SPARK			
SG301	1-517-499-21	GAP, SPARK (A3 BOARD)			
SG302	1-517-499-21	GAP, SPARK (A BOARD)			
SG401	1-519-526-11	LAMP, NEON			
SG402	1-519-422-11	GAP, SPARK			

<SOCKET>

SK401	⚠1-251-640-11	SOCKET, PICTURE TUBE			

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REF.NO.	PART NO.	DESCRIPTION			REMARK
*	8-933-269-00	GA BOARD, COMPLETE			
		**********			

<CAPACITOR>

C7501	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C7502	1-136-169-00	FILM	0.22µF	5%	50V
C7503	1-163-009-11	CERAMIC CHIP	0.001µF	10%	50V
C7504	1-136-165-00	FILM	0.1µF	5%	50V
C7505	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C7506	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V

<CONNECTOR>

CN7501*	1-774-512-11	CONNECTOR, BPARD TO BOARD 10P

<DIODE>

D7501	8-719-110-57	ZENER DIODE RD22ESB2
D7502	8-719-911-19	DIODE 1SS119-25

<IC>

IC7501	8-759-482-62	IC MC33262P

<TRANSISTOR>

Q7501	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R
Q7502	8-729-120-28	TRANSISTOR 2SC1623-L5L6
Q7503	8-729-120-28	TRANSISTOR 2SC1623-L5L6
Q7504	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R

<RESISTOR>

R7501	1-216-025-91	RES, CHIP	100	5%	1/10W
R7502	1-216-073-00	RES, CHIP	10K	5%	1/10W
R7503	1-216-041-00	RES, CHIP	470	5%	1/10W
R7504	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R7505	1-216-673-11	METAL CHIP	8.2K	0.50%	1/10W
R7506	1-216-073-00	RES, CHIP	10K	5%	1/10W
R7507	1-216-089-91	RES, CHIP	47K	5%	1/10W
R7508	1-216-073-00	RES, CHIP	10K	5%	1/10W
R7509	1-216-073-00	RES, CHIP	10K	5%	1/10W
R7510	1-216-073-00	RES, CHIP	10K	5%	1/10W
R7511	1-216-073-00	RES, CHIP	10K	5%	1/10W
R7512	1-216-089-91	RES, CHIP	47K	5%	1/10W
R7513	1-216-093-91	RES, CHIP	68K	5%	1/10W

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*	8-933-277-00	G BOARD, COMPLETE
		**********
	1-533-223-11	HOLDER, FUSE (F601)
	4-382-854-11	SCREW (M3X10), P, SW (+) (Q610, Q640, D610, D611, D672)

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REF.NO.	PART NO.	DESCRIPTION			REMARK
*	7-322-065-72	RUBBER, RTV (SE-9168) (130G) (C671, C682, VDR640)			
	7-682-947-01	SCREW +PSW 3X6 (IC660)			
		<CAPACITOR>			
C601⚠	1-113-900-51	CERAMIC	470pF	10%	250V
C602⚠	1-113-900-51	CERAMIC	470pF	10%	250V
C603⚠	1-107-533-51	FILM	1µF	20%	250V
C604⚠	1-107-533-51	FILM	1µF	20%	250V
C605⚠	1-113-926-91	CERAMIC	0.0047µF		250V
C606⚠	1-113-926-91	CERAMIC	0.0047µF		250V
C607	1-113-900-11	CERAMIC	470PF	10%	250V
C610	1-137-479-11	FILM	1µF	10%	400V
C611	1-117-849-11	ELECT	330µF	20%	450V
C612	1-126-959-11	ELECT	0.47µF	20%	50V
C616	1-107-888-11	ELECT	47µF	20%	25V
C640	1-104-330-91	CERAMIC	470pF	10%	1KV
C641	1-104-330-91	CERAMIC	470pF	10%	1KV
C642	1-136-171-00	FILM	0.33µF	5%	50V
C643	1-136-171-00	FILM	0.33µF	5%	50V
C644	1-104-330-91	CERAMIC	470pF	10%	1KV
C645	1-136-167-00	FILM	0.15µF	5%	50V
C646	1-136-167-00	FILM	0.15µF	5%	50V
C647	1-129-719-00	FILM	0.027µF	5%	630V
C660	1-111-057-11	ELECT	120µF	20%	25V
C661	1-128-526-11	ELECT	100µF	20%	16V
C662	1-130-495-00	FILM	0.1µF	5%	50V
C663	1-126-965-11	ELECT	22µF	20%	50V
C670	1-137-370-11	FILM	0.01µF	5%	50V
C671	1-107-966-51	ELECT	220µF	20%	250V
C672	1-107-959-11	ELECT	3.3µF	20%	250V
C673	1-107-935-11	ELECT	330µF	20%	100V
C674	1-107-928-11	ELECT	4.7µF	20%	100V
C675	1-107-890-11	ELECT	2200µF	20%	25V
C676	1-107-888-11	ELECT	47µF	20%	25V
C677	1-107-890-11	ELECT	2200µF	20%	25V
C678	1-107-888-11	ELECT	47µF	20%	25V
C679	1-126-927-11	ELECT	2200µF	20%	10V
C680	1-126-927-11	ELECT	2200µF	20%	10V
C681	1-107-905-11	ELECT	4.7µF	20%	50V
C682	1-126-963-11	ELECT	4.7µF	20%	50V
C683	1-164-646-11	CERAMIC	2200pF	10%	500V
C684	1-137-370-11	FILM	0.01µF	5%	50V
C685	1-107-909-11	ELECT	47µF	20%	50V
C690	1-107-888-11	ELECT	47µF	20%	25V
C691	1-107-888-11	ELECT	47µF	20%	25V
C692	1-111-016-11	ELECT	0.0012F	20%	10V
C693	1-130-495-00	FILM	0.1µF	5%	50V
C695	1-164-644-11	CERAMIC	330pF	10%	500V
C697	1-136-165-00	FILM	0.1µF	5%	50V
		<CONNECTOR>			
CN603*	1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P			
CN604*	1-691-960-11	PIN, CONNECTOR (PC BOARD) 3P			
CN605*	1-691-960-11	PIN, CONNECTOR (PC BOARD) 3P			
CN610*	1-774-511-11	CONNECTOR, BOARD TO BOARD 10P			
CN671*	1-764-334-11	PLUG, CONNECTOR 11P			
CN672*	1-564-512-11	PLUG, CONNECTOR 9P			
CN673*	1-564-508-11	PLUG, CONNECTOR 5P			
		<DIODE>			
D610 ⚠	8-719-510-53	DIODE D4SB60L			
D611	8-719-029-04	DIODE D5L60			
D612	8-719-304-63	DIODE RM11C			
D613	8-719-110-49	ZENER DIODE RD18ESB2			
D614	8-719-977-28	ZENER DIODE DTZ10B			
D617	8-719-404-50	DIODE MA111-TX			
D640	8-719-404-50	DIODE MA111-TX			
D660	8-719-059-23	DIODE P6KE200AG23			
D661	8-719-979-64	DIODE UF4005PKG23			
D662	8-719-058-91	DIODE AG01A-V0			
D663	8-719-110-31	ZENER DIODE RD12ESB2			
D666	8-719-105-99	ZENER DIODE RD6.2M-B1			
D670	8-719-064-49	DIODE D4SBL40			
D671	8-719-510-64	DIODE S2LA20F			
D672	8-719-052-91	DIODE D4SBS4-F			
D673	8-719-022-97	DIODE D2S4MF			
D674	8-719-022-97	DIODE D2S4MF			
D677	8-719-911-19	DIODE 1SS119-25			
D678	8-719-911-19	DIODE 1SS119-25			
D680	8-719-404-50	DIODE MA111			
D681	8-719-404-50	DIODE MA111			
D682	8-719-510-64	DIODE S2LA20F			
D683	8-719-911-19	DIODE 1SS119-25			
D684	8-719-110-57	ZENER DIODE RD22ESB2			
D691	8-719-510-37	DIODE D5LC20U			
D692	8-719-911-19	DIODE 1SS119-25			
D693	8-719-404-50	DIODE MA111-TX			
		<FUSE>			
F601 ⚠	1-576-233-11	FUSE (H.B.C.) (6.3A/250V)			
		<FERRITE BEAD>			
FB610	1-410-396-41	FERRITE	0.45µH		
FB611	1-410-396-41	FERRITE	0.45µH		
FB612	1-410-396-41	FERRITE	0.45µH		
		<IC>			
IC630	8-749-013-03	IC DM-60			
IC660	8-759-470-64	IC TOP223Y-BB			
IC690	8-749-011-42	IC SI-3050F			
IC691	8-759-140-85	IC µPC1093J			
		<COIL>			
L610	1-416-409-11	INDUCTOR	220µH		
L611	1-411-674-11	INDUCTOR	68µH		

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REF.NO.	PART NO.	DESCRIPTION				REMARK
L670	1-412-529-11	INDUCTOR	22µH			
L671	1-412-529-11	INDUCTOR	22µH			
L672	1-412-529-11	INDUCTOR	22µH			
L673	1-412-529-11	INDUCTOR	22µH			
L691	1-412-529-11	INDUCTOR	22µH			
		<PHOTO COUPLER>				
PH660	8-749-010-64	PHOTO COUPLER PC123F2				
PH680	8-749-010-64	PHOTO COUPLER PC123F2				
		<IC LINK>				
PS670⚠	1-533-593-31	LINK, IC (2A/90V AC, 60V DC)				
PS671⚠	1-533-593-31	LINK, IC (2A/90V AC, 60V DC)				
PS673⚠	1-533-593-31	LINK, IC (2A/90V AC, 60V DC)				
PS674⚠	1-533-593-31	LINK, IC (2A/90V AC, 60V DC)				
		<TRANSISTOR>				
Q610	8-729-041-65	TRANSISTOR 2SK2195F04				
Q615	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R				
Q640	8-729-041-12	TRANSISTOR MX0841AB-F				
Q641	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q642	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q660	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q680	8-729-120-28	TRANSISTOR 2SC1623-L5L6				
Q681	8-729-230-45	TRANSISTOR 2SC2458-YGR				
Q682	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q683	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q690	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q691	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R				
		<RESISTOR>				
R601⚠	1-220-825-91	CARBON	330K	5%	1/2W	
R604	1-260-089-11	CARBON	150	5%	1/2W	
R610	1-216-383-11	METAL OXIDE	0.33	5%	3W	F
R611	1-216-383-11	METAL OXIDE	0.33	5%	3W	F
R612	1-215-477-00	METAL	220K	1%	1/4W	
R613	1-215-477-00	METAL	220K	1%	1/4W	
R614	1-215-473-00	METAL	150K	1%	1/4W	
R615	1-215-473-00	METAL	150K	1%	1/4W	
R616	1-215-473-00	METAL	150K	1%	1/4W	
R617	1-215-481-00	METAL	330K	1%	1/4W	
R618	1-215-477-00	METAL	220K	1%	1/4W	
R619	1-215-485-00	METAL	470K	1%	1/4W	
R620	1-215-485-00	METAL	470K	1%	1/4W	
R621	1-215-481-00	METAL	330K	1%	1/4W	
R622	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R623	1-216-651-11	METAL CHIP	1K	0.50%	1/10W	
R624	1-216-671-11	METAL CHIP	6.8K	0.50%	1/10W	
R625	1-249-389-11	CARBON	4.7	5%	1/4W	
R626	1-249-429-11	CARBON	10K	5%	1/4W	
R627	1-215-479-00	METAL	270K	1%	1/4W	
R628	1-215-481-00	METAL	330K	1%	1/4W	
R629	1-215-461-00	METAL	47K	1%	1/4W	
R631	1-247-807-31	CARBON	100	5%	1/4W	
R632	1-216-073-00	RES, CHIP	10K	5%	1/10W	
R633	1-215-481-00	METAL	330K	1%	1/4W	
R635	1-216-073-00	RES, CHIP	10K	5%	1/10W	
R640	1-202-933-61	FUSIBLE	0.1	10%	1/2W	F
R641	1-218-642-11	METAL OXIDE	100K	5%	1W	F
R642	1-218-642-11	METAL OXIDE	100K	5%	1W	F
R643	1-247-863-91	CARBON	22K	5%	1/4W	
R644	1-216-105-91	RES, CHIP	220K	5%	1/10W	
R645	1-216-081-00	RES, CHIP	22K	5%	1/10W	
R646	1-216-073-00	RES, CHIP	10K	5%	1/10W	
R647	1-249-441-11	CARBON	100K	5%	1/4W	
R648	1-216-353-00	METAL OXIDE	2.2	5%	1W	F
R649	1-218-642-11	METAL OXIDE	100K	5%	1W	F
R650	1-218-642-11	METAL OXIDE	100K	5%	1W	F
R651	1-216-353-00	METAL OXIDE	2.2	5%	1W	F
R652	1-212-942-00	FUSIBLE	2.2	5%	1/2W	F
R655	1-216-073-00	RES, CHIP	10K	5%	1/10W	
R661	1-249-387-11	CARBON	3.3	5%	1/4W	F
R662	1-216-073-00	RES, CHIP	10K	5%	1/10W	
R663	1-216-073-00	RES, CHIP	10K	5%	1/10W	
R664	1-247-791-91	CARBON	22	5%	1/4W	
R665	1-216-033-00	RES, CHIP	220	5%	1/10W	
R666	1-215-441-00	METAL	6.8K	1%	1/4W	
R667	1-215-433-00	METAL	3.3K	1%	1/4W	
R668	1-249-401-11	CARBON	47	5%	1/4W	
R669	1-216-057-00	RES, CHIP	2.2K	5%	1/10W	
R671	1-216-113-00	RES, CHIP	470K	5%	1/10W	
R672	1-216-049-91	RES, CHIP	1K	5%	1/10W	
R673	1-249-413-11	CARBON	470	5%	1/4W	F
R674	1-249-377-11	CARBON	0.47	5%	1/4W	F
R675	1-260-292-11	CARBON	1	5%	1/2W	
R676	1-249-413-11	CARBON	470	5%	1/4W	
R680	1-216-073-00	RES, CHIP	10K	5%	1/10W	
R681	1-216-049-91	RES, CHIP	1K	5%	1/10W	
R682	1-216-065-91	RES, CHIP	4.7K	5%	1/10W	
R683	1-216-025-91	RES, CHIP	100	5%	1/10W	
R685	1-216-073-00	RES, CHIP	10K	5%	1/10W	
R686	1-216-049-91	RES, CHIP	1K	5%	1/10W	
R687	1-216-049-91	RES, CHIP	1K	5%	1/10W	
R688	1-216-073-00	RES, CHIP	10K	5%	1/10W	
R689	1-216-073-00	RES, CHIP	10K	5%	1/10W	
R691	1-216-073-00	RES, CHIP	10K	5%	1/10W	
R692	1-260-085-11	CARBON	68	5%	1/2W	
R693	1-216-065-91	RES, CHIP	4.7K	5%	1/10W	
R694	1-216-073-00	RES, CHIP	10K	5%	1/10W	
R695	1-249-443-11	CARBON	0.47	5%	1/4W	F
R696	1-216-633-11	METAL CHIP	180	0.50%	1/10W	
R697	1-216-649-11	METAL CHIP	820	0.50%	1/10W	
R698	1-216-073-00	RES, CHIP	10K	5%	1/10W	
R699	1-216-081-00	RES, CHIP	22K	5%	1/10W	
		<RELAY>				
RY601⚠	1-515-669-21	RELAY				

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Les composants identifiés par un tramé et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION	REMARK
RY602	⚠1-755-031-11	RELAY	
		<TRANSFORMER>	
T601	⚠ 1-429-180-11	TRANSFORMER, LINE FILTER	
T640	1-431-538-11	TRANSFORMER, CONVERTER (PIT)	
T641	1-429-992-11	TRANSFORMER, CONVERTER (PRT)	
T660	1-431-565-11	TRANSFORMER, CONVERTER (SRT)	
		<THERMISTOR>	
TH601	⚠1-809-260-11	THERMISTOR, POWER	
THP601	⚠1-809-827-11	THERMISTOR, POSITIVE	
		<VARISTOR>	
VDR601	⚠1-801-268-51	VARISTOR TNR14V471K660	
VDR602	⚠1-810-622-21	VARISTOR	
VDR640	1-810-974-21	VARISTOR TNR10V431K660	
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*	8-933-276-00	D BOARD, COMPLETE **********	
	4-040-989-01	SPRING (A), TR RETAINER (IC702)	
	4-040-992-01	SPRING (AA), TR RETAINER (IC502, Q507)	
	4-040-994-01	SPRING (BB), TR RETAINER (Q508, D519)	
	4-047-285-01	SHEET, INSULATING (Q909)	
	4-060-719-02	SHEET, INSULATE (IC502)	
	4-060-720-01	SHEET, INSULATE (Q508)	
	4-060-844-01	SHEET, INSULATING (IC702)	
	4-382-854-01	SCREW (M3X8), P, SW (+) (R937)	
	4-382-854-11	SCREW (M3X10), P, SW (+) (IC702, Q704, Q706, Q908, Q909)	
	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3 (IC502, Q507, Q508, D519, R511)	
		<CAPACITOR>	
C001	1-163-021-91	CERAMIC CHIP 0.01µF 10% 50V	
C002	1-163-009-11	CERAMIC CHIP 0.001µF 10% 50V	
C003	1-163-019-00	CERAMIC CHIP 0.0068µF 10% 50V	
C004	1-163-021-91	CERAMIC CHIP 0.01µF 10% 50V	
C005	1-163-021-91	CERAMIC CHIP 0.01µF 10% 50V	
C007	1-163-021-91	CERAMIC CHIP 0.01µF 10% 50V	
C008	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C009	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C010	1-163-237-11	CERAMIC CHIP 27pF 5% 50V	
C011	1-163-237-11	CERAMIC CHIP 27pF 5% 50V	
C012	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C013	1-126-967-11	ELECT 47µF 20% 50V	
C014	1-107-914-11	ELECT 1000µF 20% 25V	
C015	1-107-914-11	ELECT 1000µF 20% 25V	
C016	1-163-009-11	CERAMIC CHIP 0.001µF 10% 50V	
C017	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C018	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C019	1-126-967-11	ELECT 47µF 20% 50V	
C020	1-163-021-91	CERAMIC CHIP 0.01µF 10% 50V	
C021	1-163-023-00	CERAMIC CHIP 0.015µF 10% 50V	
C022	1-126-933-11	ELECT 100µF 20% 16V	
C023	1-163-009-11	CERAMIC CHIP 0.001µF 10% 50V	
C025	1-126-960-11	ELECT 1µF 20% 50V	
C026	1-137-372-11	FILM 0.022µF 5% 50V	
C027	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C028	1-164-690-91	CERAMIC CHIP 0.0022µF 5% 50V	
C029	1-126-960-11	ELECT 1µF 20% 50V	
C030	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C031	1-163-021-91	CERAMIC CHIP 0.01µF 10% 50V	
C032	1-163-019-00	CERAMIC CHIP 0.0068µF 10% 50V	
C034	1-163-021-91	CERAMIC CHIP 0.01µF 10% 50V	
C035	1-163-253-11	CERAMIC CHIP 120pF 5% 50V	
C036	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C037	1-126-934-11	ELECT 220µF 20% 16V	
C038	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C039	1-126-964-11	ELECT 10µF 20% 50V	
C040	1-126-963-11	ELECT 4.7µF 20% 50V	
C041	1-126-960-11	ELECT 1µF 20% 50V	
C042	1-126-967-11	ELECT 47µF 20% 50V	
C043	1-126-967-11	ELECT 47µF 20% 50V	
C044	1-126-967-11	ELECT 47µF 20% 50V	
C045	1-163-137-00	CERAMIC CHIP 680pF 5% 50V	
C046	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C047	1-126-934-11	ELECT 220µF 20% 16V	
C048	1-164-690-91	CERAMIC CHIP 0.0022µF 5% 50V	
C049	1-163-137-00	CERAMIC CHIP 680pF 5% 50V	
C050	1-163-809-11	CERAMIC CHIP 0.047µF 10% 25V	
C051	1-126-960-11	ELECT 1µF 20% 50V	
C052	1-163-809-11	CERAMIC CHIP 0.047µF 10% 25V	
C054	1-126-963-11	ELECT 4.7µF 20% 50V	
C055	1-126-963-11	ELECT 4.7µF 20% 50V	
C056	1-163-809-11	CERAMIC CHIP 0.047µF 10% 25V	
C057	1-107-909-11	ELECT 47µF 20% 50V	
C058	1-126-934-11	ELECT 220µF 20% 16V	
C059	1-163-021-91	CERAMIC CHIP 0.01µF 10% 50V	
C060	1-126-964-11	ELECT 10µF 20% 50V	
C061	1-163-021-91	CERAMIC CHIP 0.01µF 10% 50V	
C063	1-130-495-00	FILM 0.1µF 5% 50V	
C065	1-126-965-11	ELECT 22µF 20% 50V	
C066	1-163-021-91	CERAMIC CHIP 0.01µF 10% 50V	
C067	1-163-243-11	CERAMIC CHIP 47pF 5% 50V	
C068	1-126-964-11	ELECT 10µF 20% 50V	
C069	1-163-021-91	CERAMIC CHIP 0.01µF 10% 50V	
C070	1-163-021-91	CERAMIC CHIP 0.01µF 10% 50V	
C072	1-126-960-11	ELECT 1µF 20% 50V	
C073	1-163-227-11	CERAMIC CHIP 10pF 0.5pF 50V	
C074	1-163-009-11	CERAMIC CHIP 0.001µF 10% 50V	
C075	1-163-021-91	CERAMIC CHIP 0.01µF 10% 50V	
C076	1-163-809-11	CERAMIC CHIP 0.047µF 10% 25V	
C077	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C078	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	

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REF.NO.	PART NO.	DESCRIPTION			REMARK
C079	1-126-967-11	ELECT	47µF	20%	50V
C080	1-126-967-11	ELECT	47µF	20%	50V
C081	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C082	1-126-964-11	ELECT	10µF	20%	50V
C083	1-130-495-00	FILM	0.1µF	5%	50V
C084	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C085	1-130-495-00	FILM	0.1µF	5%	50V
C086	1-126-964-11	ELECT	10µF	20%	50V
C087	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C088	1-163-251-11	CERAMIC CHIP	100pF	5%	50V
C089	1-163-251-11	CERAMIC CHIP	100pF	5%	50V
C090	1-109-982-11	CERAMIC CHIP	1µF	10%	10V
C092	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C093	1-126-964-11	ELECT	10µF	20%	50V
C094	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C095	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C096	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C097	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C098	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C099	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C501	1-107-909-11	ELECT	47µF	20%	50V
C502	1-163-259-91	CERAMIC CHIP	220pF	5%	50V
C503	1-136-169-00	FILM	0.22µF	5%	50V
C504	1-137-605-11	FILM	0.01µF	10%	250V
C505	1-163-251-11	CERAMIC CHIP	100pF	5%	50V
C506	1-136-169-00	FILM	0.22µF	5%	50V
C507	1-137-194-81	FILM	0.47µF	5%	50V
C508	1-163-037-11	CERAMIC CHIP	0.022µF	10%	50V
C509	1-126-941-11	ELECT	470µF	20%	25V
C510	1-137-368-11	FILM	0.0047µF	5%	50V
C511	1-117-398-11	ELECT	33µF	20%	250V
C512	1-107-889-11	ELECT	220µF	20%	25V
C513	1-163-017-00	CERAMIC CHIP	0.0047µF	10%	50V
C514	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C515	1-107-889-11	ELECT	220µF	20%	25V
C516	1-130-495-00	FILM	0.1µF	5%	50V
C517	1-104-574-11	CERAMIC	0.0047µF	10%	2KV
C518	1-117-959-11	FILM	4700pF	3%	1.8KV
C519	1-107-444-11	CERAMIC	100pF	5%	2KV
C520	1-136-553-11	FILM	0.0015µF	5%	630V
C521	1-107-597-11	CERAMIC	22pF	5%	500V
C522	1-107-444-11	CERAMIC	100pF	5%	2KV
C523	1-137-370-11	FILM	0.01µF	5%	50V
C524	1-113-694-11	FILM	0.056µF	5%	250V
C525	1-107-846-11	FILM	0.1µF	5%	250V
C526	1-115-514-11	FILM	0.22µF	5%	250V
C527	1-115-517-11	FILM	0.39µF	5%	250V
C528	1-115-521-11	FILM	0.82µF	5%	250V
C529	1-107-683-11	ELECT	2.2µF	0	250V
C530	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C531	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C532	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C533	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C534	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C535	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C536	1-128-526-11	ELECT	100µF	20%	25V
C537	1-115-523-21	FILM	1.2µF	5%	250V
C538	1-117-958-11	FILM	0.24µF	5%	400V
C539	1-107-960-11	ELECT	4.7µF	20%	250V
C540	1-106-343-00	MYLAR	0.001µF	10%	200V
C541	1-163-243-11	CERAMIC CHIP	47pF	5%	50V
C542	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C544	1-137-368-11	FILM	0.0047µF	5%	50V
C545	1-126-967-11	ELECT	47µF	20%	50V
C547	1-126-967-11	ELECT	47µF	20%	50V
C549	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C550	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C551	1-163-009-11	CERAMIC CHIP	0.001µF	10%	50V
C553	1-126-963-11	ELECT	4.7µF	20%	50V
C554	1-163-037-11	CERAMIC CHIP	0.022µF	10%	50V
C555	1-163-037-11	CERAMIC CHIP	0.022µF	10%	50V
C556	1-163-009-11	CERAMIC CHIP	0.001µF	10%	50V
C557	1-115-185-11	CERAMIC CHIP	0.033µF	10%	50V
C559	1-162-134-11	CERAMIC	470pF	10%	2KV
C561	1-137-194-81	FILM	0.47µF	5%	50V
C562	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C563	1-117-214-11	CERAMIC	0.001µF	10%	2KV
C564	1-126-963-11	ELECT	4.7µF	20%	50V
C666	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C667	1-126-967-11	ELECT	47µF	20%	50V
C701	1-126-967-11	ELECT	47µF	20%	50V
C702	1-130-495-00	FILM	0.1µF	5%	50V
C705	1-126-942-61	ELECT	1000µF	20%	25V
C706	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C707	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C709	1-130-495-00	FILM	0.1µF	5%	50V
C710	1-163-019-00	CERAMIC CHIP	0.0068µF	10%	50V
C711	1-107-894-11	ELECT	220µF	20%	35V
C712	1-106-228-00	MYLAR	0.22µF	10%	100V
C713	1-126-942-61	ELECT	1000µF	20%	25V
C714	1-126-967-11	ELECT	47µF	20%	50V
C715	1-107-932-11	ELECT	47µF	20%	100V
C717	1-107-930-91	ELECT	22µF	20%	100V
C729	1-162-134-11	CERAMIC	470pF	10%	2KV
C735	1-130-495-00	FILM	0.1µF	5%	50V
C746	1-163-009-11	CERAMIC CHIP	0.001µF	10%	50V
C747	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C750	1-126-964-11	ELECT	10µF	20%	50V
C751	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C901	1-107-889-11	ELECT	220µF	20%	25V
C902	1-163-809-11	CERAMIC CHIP	0.047µF	10%	25V
C903	1-163-259-91	CERAMIC CHIP	220pF	5%	50V
C904	1-137-605-11	FILM	0.01µF	10%	250V
C905	1-104-653-11	ELECT	220µF	20%	16V
C906	1-106-220-00	MYLAR	0.1µF	10%	100V
C907	1-119-748-11	ELECT	33µF	20%	400V
C908	1-136-169-00	FILM	0.22µF	5%	50V
C909	1-106-355-12	MYLAR	0.0033µF	10%	200V
C910	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C911	1-163-275-11	CERAMIC CHIP	0.001µF	5%	50V
C912	1-163-275-11	CERAMIC CHIP	0.001µF	5%	50V
C913	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V

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REF.NO.	PART NO.	DESCRIPTION			REMARK
C914	1-163-275-11	CERAMIC CHIP	0.001µF	5%	50V
C915	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C916	1-136-064-00	FILM	2200pF	3%	1.2KV
C917	1-107-889-11	ELECT	220µF	20%	25V
C919	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C920	1-163-009-11	CERAMIC CHIP	0.001µF	10%	50V
C921	1-163-243-11	CERAMIC CHIP	47pF	5%	50V
C922	1-117-665-11	FILM	0.33µF	5%	200V
C923	1-106-359-00	MYLAR	0.0047µF	10%	100V
C924	1-106-220-00	MYLAR	0.1µF	10%	100V
C925	1-137-372-11	FILM	0.022µF	5%	50V
C926	1-106-228-00	MYLAR	0.22µF	10%	100V
C927	1-107-903-11	ELECT	2.2µF	20%	50V
C928	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C929	1-128-526-11	ELECT	100µF	20%	25V
C930	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C931	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C945	1-107-909-11	ELECT	47µF	20%	50V
C1003	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C1004	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C1005	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C1007	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C1008	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C1009	1-126-960-11	ELECT	1µF	20%	50V
C1501	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C1502	1-117-722-11	ELECT	2200µF	20%	10V
C1503	1-163-001-11	CERAMIC CHIP	220pF	10%	50V

<CONNECTOR>

CN501*	1-564-512-11	PLUG, CONNECTOR 9P
CN502*	1-764-334-11	PLUG, CONNECTOR 11P
CN503*	1-564-510-11	PLUG, CONNECTOR 7P
CN504*	1-564-508-11	PLUG, CONNECTOR 5P
CN505*	1-508-879-11	BASE POST
CN506*	1-564-511-11	PLUG, CONNECTOR 8P
CN507	1-764-101-11	PIN, CONNECTOR (PC BOARD) 2P
CN508*	1-778-955-11	PIN, CONNECTOR (PC BOARD) 10P
CN509	1-564-505-11	PLUG, CONNECTOR 2P
CN511*	1-764-334-11	PLUG, CONNECTOR 11P
CN512*	1-564-512-11	PLUG, CONNECTOR 9P
CN520*	1-564-509-11	PLUG, CONNECTOR 6P
CN901*	1-564-520-11	PLUG, CONNECTOR 5P

<DIODE>

D004	8-719-800-76	DIODE 1SS226
D009	8-719-976-99	DIODE DTZ5.1B
D010	8-719-976-99	ZENER DIODE DTZ5.1B
D012	8-719-800-76	DIODE 1SS226
D013	8-719-800-76	DIODE 1SS226
D014	8-719-800-76	DIODE 1SS226
D015	8-719-800-76	DIODE 1SS226
D016	8-719-800-76	DIODE 1SS226
D019	8-719-800-76	DIODE 1SS226
D020	8-719-800-76	DIODE 1SS226
D025	8-719-976-99	ZENER DIODE DTZ5.1B
D026	8-719-800-76	DIODE 1SS226
D027	8-719-800-76	DIODE 1SS226
D028	8-719-800-76	DIODE 1SS226
D029	8-719-800-76	DIODE 1SS226
D032	8-719-976-99	ZENER DIODE DTZ5.1B
D035	8-719-801-78	DIODE 1SS184
D050	8-719-404-50	DIODE MA111-TX
D501	8-719-977-40	ZENER DIODE DTZ13B
D502	8-719-063-89	DIODE YG911S3R
D503	8-719-404-50	DIODE MA111-TX
D504	8-719-984-73	DIODE SB560
D505	8-719-018-82	DIODE RGP02-20EL-6394
D506	8-719-911-19	DIODE 1SS119-25
D507	8-719-911-19	DIODE 1SS119-25
D508	8-719-109-85	ZENER DIODE RD5.1ESB2
D509	8-719-911-19	DIODE 1SS119-25
D510	8-719-951-30	DIODE ERA91-02
D511	8-719-911-19	DIODE 1SS119-25
D512	8-719-018-82	DIODE RGP02-20EL-6394
D513	8-719-404-50	DIODE MA111-TX
D514	8-719-109-93	ZENER DIODE RD6.2ESB2
D516	8-719-105-99	ZENER DIODE RD6.2M-B1
D517	8-719-105-99	ZENER DIODE RD6.2M-B1
D518	8-719-404-50	DIODE MA111-TX
D519	8-719-066-36	DIODE FMQ-G5GS
D520	8-719-031-34	DIODE RGP02-20EG23
D521	8-719-404-50	DIODE MA111-TX
D660	8-719-977-69	ZENER DIODE DTZ24B
D701	8-719-158-15	ZENER DIODE RD5.6SB
D704	8-719-404-50	DIODE MA111-TX
D705	8-719-404-50	DIODE MA111-TX
D706	8-719-976-99	ZENER DIODE DTZ5.1B
D709	8-719-979-85	DIODE EGP20G
D713	8-719-911-19	DIODE 1SS119-25
D714	8-719-911-19	DIODE 1SS119-25
D715	8-719-911-19	DIODE 1SS119-25
D718	8-719-976-99	ZENER DIODE DTZ5.1B
D720	8-719-028-72	DIODE RGP02-17EL-6433
D721	8-719-028-72	DIODE RGP02-17EL-6433
D901	8-719-404-50	DIODE MA111-TX
D902	8-719-404-50	DIODE MA111-TX
D903	8-719-911-19	DIODE 1SS119-25
D904	8-719-404-50	DIODE MA111-TX
D905	8-719-404-50	DIODE MA111-TX
D906	8-719-404-50	DIODE MA111-TX
D907	8-719-158-49	ZENER DIODE RD12SB2
D908	8-719-158-49	ZENER DIODE RD12SB2
D909	8-719-977-40	ZENER DIODE DTZ13B
D910	8-719-063-89	DIODE YG911S3R
D911	8-719-978-69	ZENER DIODE DTZ-TT11-16B
D913	8-719-158-49	ZENER DIODE RD12SB2
D915	8-719-109-85	ZENER DIODE RD5.1ESB2
D916	8-719-939-79	DIODE GMA01-BT
D917	8-719-110-46	ZENER DIODE RD16ESB3
D919	8-719-911-19	DIODE 1SS119-25

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifiés par un tramé et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

REF.NO.	PART NO.	DESCRIPTION	REMARK
D921	8-719-404-50	DIODE MA111-TX	
D922	8-719-404-50	DIODE MA111-TX	
D923	8-719-404-50	DIODE MA111-TX	
D924	8-719-976-99	ZENER DIODE DTZ5.1B	
D935	8-719-977-81	ZENER DIODE DTZ33B	
D1501	8-719-976-99	ZENER DIODE DTZ5.1B	
D1502	8-719-404-50	DIODE MA111-TX	
D1503	8-719-404-50	DIODE MA111-TX	
		<FERRITE BEAD>	
FB501	1-410-397-21	INDUCTOR, FERRITE BEAD	1.1µH
FB502	1-410-397-21	INDUCTOR, FERRITE BEAD	1.1µH
FB901	1-410-397-21	INDUCTOR, FERRITE BEAD	1.1µH
FB1025	1-414-232-11	INDUCTOR, FERRITE BEAD	1.1µH
		<IC>	
IC001	8-759-531-24	IC MB90553PF-G-120-BND	
IC002	8-759-442-20	IC 24LC21AT/SN	
IC003	8-759-168-20	IC TA78L09S	
IC004	8-759-454-79	IC 24LC16BT/SN	
IC005	8-759-162-80	IC MM1170BFB	
IC006	8-759-231-53	IC TA7805S	
IC007	8-752-078-46	IC CXA2043Q	
IC008	8-759-701-59	IC NJM78M09FA	
IC009	8-759-082-57	IC TC7W04FU	
IC010	8-752-083-83	IC CXA2044M-T6	
IC011	8-759-708-05	IC NJM78L05A	
IC013	8-759-233-66	IC TC74HCT04AF	
IC502	8-759-803-42	IC LA6500-FA	
IC505	8-759-100-96	IC µPC4558G2	
IC701	8-759-822-38	IC LA6510	
IC702	8-759-444-82	IC LA7841L	
IC703	8-759-100-96	IC µPC4558G2	
IC901	8-759-467-70	IC BA9756FS-E2	
		<CHIP CONDUCTOR>	
JR001	1-216-295-91	SHORT	0
JR002	1-216-295-91	SHORT	0
JR003	1-216-295-91	SHORT	0
JR004	1-216-295-91	SHORT	0
		<COIL>	
L001	1-406-665-11	COIL, CHOKE	100µH
L002	1-406-665-11	COIL, CHOKE	100µH
L003	1-412-537-31	INDUCTOR	100µH
L004	1-412-537-31	INDUCTOR	100µH
L006	1-410-482-31	INDUCTOR	100µH
L007	1-412-537-31	INDUCTOR	100µH
L008	1-412-537-31	INDUCTOR	100µH
L501	1-412-537-31	INDUCTOR	100µH
L502	1-406-671-11	COIL, CHOKE	1.0mH
L503	1-416-455-11	COIL, HORIZONTAL LINEARITY	
L504	1-416-456-11	COIL, HORIZONTAL LINEARITY	
L505	1-406-675-11	COIL, CHOKE	4.7mH
L507	1-406-675-11	COIL, CHOKE	4.7mH
L701	1-412-537-31	INDUCTOR	100µH
L702	1-412-522-31	INDUCTOR	5.6µH
L901	1-412-537-31	INDUCTOR	100µH
L902	1-406-660-41	COIL, CHOKE	15µH
L903	1-412-537-31	INDUCTOR	100µH
		<IC LINK>	
PS501⚠	1-533-592-31	LINK, IC (1.6A/90V AC, 60V DC)	
PS502⚠	1-532-984-91	LINK, IC (2A/90V)	
PS503⚠	1-532-984-91	LINK, IC (2A/90V)	
PS504⚠	1-532-984-91	LINK, IC (2A/90V)	
PS701⚠	1-533-590-31	LINK, IC (1A/90V AC, 60V DC)	
PS901⚠	1-533-592-31	LINK, IC (1.6A/90V AC, 60V DC)	
		<TRANSISTOR>	
Q001	8-729-027-31	TRANSISTOR DTA124EKA-T146	
Q003	8-729-920-72	TRANSISTOR 2SA1037K-T-146-QR	
Q004	8-729-920-72	TRANSISTOR 2SA1037K-T-146-QR	
Q005	8-729-920-72	TRANSISTOR 2SA1037K-T-146-QR	
Q006	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q007	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q501	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q502	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q503	8-729-901-97	TRANSISTOR 2SA1036K-Q	
Q504	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q505	8-729-901-97	TRANSISTOR 2SA1036K-Q	
Q506	8-729-820-73	TRANSISTOR 2SC3746	
Q507	8-729-035-54	TRANSISTOR 2SJ449	
Q508	8-729-031-87	TRANSISTOR 2SC5047-CA	
Q509	8-729-033-25	TRANSISTOR DTC114GKA	
Q510	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q511	8-729-140-50	TRANSISTOR 2SC3209LK	
Q512	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q517	8-729-920-72	TRANSISTOR 2SA1037K-T-146-QR	
Q522	8-729-043-41	TRANSISTOR 2SK2098-01MR-F119	
Q523	8-729-043-41	TRANSISTOR 2SK2098-01MR-F119	
Q524	8-729-043-41	TRANSISTOR 2SK2098-01MR-F119	
Q525	8-729-043-41	TRANSISTOR 2SK2098-01MR-F119	
Q526	8-729-043-41	TRANSISTOR 2SK2098-01MR-F119	
Q527	8-729-043-41	TRANSISTOR 2SK2098-01MR-F119	
Q528	8-729-043-41	TRANSISTOR 2SK2098-01MR-F119	
Q660	8-729-033-26	TRANSISTOR DTA114GKAT146	
Q661	8-729-033-25	TRANSISTOR DTC114GKA	
Q701	8-729-800-32	TRANSISTOR 2SC2362K-G	
Q703	8-729-178-43	TRANSISTOR 2SC2784-E	
Q704	8-729-207-82	TRANSISTOR 2SC3421-Y	
Q705	8-729-204-91	TRANSISTOR 2SA1049-GR	
Q706	8-729-207-89	TRANSISTOR 2SA1358-Y	
Q707	8-729-920-72	TRANSISTOR 2SA1037K-T-146-QR	
Q708	8-729-020-07	TRANSISTOR 2SC4686A(LBSONY)	
Q901	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q902	8-729-920-72	TRANSISTOR 2SA1037K-T-146-QR	

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REF.NO.	PART NO.	DESCRIPTION			REMARK
Q904	8-729-901-87	TRANSISTOR 2SC2411K-CQ			
Q905	8-729-901-97	TRANSISTOR 2SA1036K-Q			
Q908	8-729-035-54	TRANSISTOR 2SJ449			
Q909	8-729-033-91	TRANSISTOR 2SK1120LBSONY2			
Q911	8-729-033-25	TRANSISTOR DTC114GKA			
		<RESISTOR>			
R001	1-216-025-91	RES, CHIP	100	5%	1/10W
R002	1-216-049-91	RES, CHIP	1K	5%	1/10W
R003	1-216-049-91	RES, CHIP	1K	5%	1/10W
R004	1-216-049-91	RES, CHIP	1K	5%	1/10W
R005	1-216-073-00	RES, CHIP	10K	5%	1/10W
R006	1-216-049-91	RES, CHIP	1K	5%	1/10W
R007	1-216-025-91	RES, CHIP	100	5%	1/10W
R008	1-216-089-91	RES, CHIP	47K	5%	1/10W
R009	1-216-025-91	RES, CHIP	100	5%	1/10W
R010	1-216-081-00	RES, CHIP	22K	5%	1/10W
R011	1-216-097-91	RES, CHIP	100K	5%	1/10W
R012	1-216-025-91	RES, CHIP	100	5%	1/10W
R013	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R017	1-216-049-91	RES, CHIP	1K	5%	1/10W
R018	1-216-049-91	RES, CHIP	1K	5%	1/10W
R020	1-216-049-91	RES, CHIP	1K	5%	1/10W
R023	1-216-025-91	RES, CHIP	100	5%	1/10W
R024	1-216-089-91	RES, CHIP	47K	5%	1/10W
R025	1-216-295-91	SHORT	0		
R026	1-216-073-00	RES, CHIP	10K	5%	1/10W
R027	1-216-073-00	RES, CHIP	10K	5%	1/10W
R030	1-216-017-91	RES, CHIP	47	5%	1/10W
R031	1-216-073-00	RES, CHIP	10K	5%	1/10W
R032	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R033	1-216-017-91	RES, CHIP	47	5%	1/10W
R034	1-216-025-91	RES, CHIP	100	5%	1/10W
R035	1-216-049-91	RES, CHIP	1K	5%	1/10W
R036	1-216-025-91	RES, CHIP	100	5%	1/10W
R037	1-216-686-11	METAL CHIP	30K	0.50%	1/10W
R038	1-216-685-11	METAL CHIP	27K	0.50%	1/10W
R039	1-216-049-91	RES, CHIP	1K	5%	1/10W
R040	1-216-049-91	RES, CHIP	1K	5%	1/10W
R041	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R042	1-216-089-91	RES, CHIP	47K	5%	1/10W
R043	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R044	1-216-095-00	RES, CHIP	82K	5%	1/10W
R045	1-216-073-00	RES, CHIP	10K	5%	1/10W
R046	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R047	1-216-073-00	RES, CHIP	10K	5%	1/10W
R048	1-216-049-91	RES, CHIP	1K	5%	1/10W
R050	1-216-025-91	RES, CHIP	100	5%	1/10W
R051	1-216-679-11	METAL CHIP	15K	0.50%	1/10W
R052	1-216-073-00	RES, CHIP	10K	5%	1/10W
R053	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R054	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R055	1-216-089-91	RES, CHIP	47K	5%	1/10W
R056	1-216-671-11	METAL CHIP	6.8K	0.50%	1/10W
R057	1-216-679-11	METAL CHIP	15K	0.50%	1/10W
R058	1-216-663-11	METAL CHIP	3.3K	0.50%	1/10W
R059	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R060	1-216-025-91	RES, CHIP	100	5%	1/10W
R061	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R063	1-216-025-91	RES, CHIP	100	5%	1/10W
R064	1-216-025-91	RES, CHIP	100	5%	1/10W
R065	1-216-025-91	RES, CHIP	100	5%	1/10W
R066	1-216-025-91	RES, CHIP	100	5%	1/10W
R067	1-216-025-91	RES, CHIP	100	5%	1/10W
R068	1-216-025-91	RES, CHIP	100	5%	1/10W
R069	1-216-017-91	RES, CHIP	47	5%	1/10W
R070	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R071	1-216-049-91	RES, CHIP	1K	5%	1/10W
R072	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R073	1-216-295-91	SHORT	0		
R074	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R075	1-216-049-91	RES, CHIP	1K	5%	1/10W
R076	1-216-049-91	RES, CHIP	1K	5%	1/10W
R077	1-216-049-91	RES, CHIP	1K	5%	1/10W
R078	1-216-049-91	RES, CHIP	1K	5%	1/10W
R081	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R082	1-216-049-91	RES, CHIP	1K	5%	1/10W
R083	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R084	1-216-025-91	RES, CHIP	100	5%	1/10W
R085	1-216-025-91	RES, CHIP	100	5%	1/10W
R086	1-216-049-91	RES, CHIP	1K	5%	1/10W
R088	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R089	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R090	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R092	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R094	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R096	1-216-671-11	METAL CHIP	6.8K	0.50%	1/10W
R097	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R101	1-216-049-91	RES, CHIP	1K	5%	1/10W
R501	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R502	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R503	1-216-041-00	RES, CHIP	470	5%	1/10W
R504	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R505	1-216-041-00	RES, CHIP	470	5%	1/10W
R506	1-249-397-11	CARBON	22	5%	1/4W F
R507	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R508	1-216-025-91	RES, CHIP	100	5%	1/10W
R509	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R510	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R511	1-219-726-11	METAL	2.2	5%	10W
R512	1-216-627-11	METAL CHIP	100	0.50%	1/10W
R513	1-215-860-11	METAL OXIDE	33	5%	1W F
R514	1-211-796-11	FUSIBLE	1	5%	1/2W F
R515	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R516	1-247-815-91	CARBON	220	5%	1/4W
R517	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R518	1-216-097-91	RES, CHIP	100K	5%	1/10W
R519	1-216-393-00	METAL OXIDE	2.2	5%	3W F
R520	1-216-393-00	METAL OXIDE	2.2	5%	3W F
R521	1-249-413-11	CARBON	470	5%	1/4W F
R522	1-216-423-11	METAL OXIDE	27	5%	1W F

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REF.NO.	PART NO.	DESCRIPTION			REMARK
R523	1-249-421-11	CARBON	2.2K	5% 1/4W	F
R524	1-215-869-11	METAL OXIDE	1K	5% 1W	F
R525	1-216-681-11	METAL CHIP	18K	0.50% 1/10W	
R526	1-214-840-00	METAL	100	1% 1/2W	
R527	1-214-840-00	METAL	100	1% 1/2W	
R528	1-214-840-00	METAL	100	1% 1/2W	
R529	1-260-313-51	CARBON	56	5% 1/2W	
R530	1-249-437-11	CARBON	47K	5% 1/4W	
R531	1-249-437-11	CARBON	47K	5% 1/4W	
R532	1-249-437-11	CARBON	47K	5% 1/4W	
R533	1-249-437-11	CARBON	47K	5% 1/4W	
R534	1-249-437-11	CARBON	47K	5% 1/4W	
R535	1-216-049-91	RES, CHIP	1K	5% 1/10W	
R536	1-216-049-91	RES, CHIP	1K	5% 1/10W	
R537	1-216-049-91	RES, CHIP	1K	5% 1/10W	
R538	1-216-049-91	RES, CHIP	1K	5% 1/10W	
R539	1-216-049-91	RES, CHIP	1K	5% 1/10W	
R540	1-216-073-00	RES, CHIP	10K	5% 1/10W	
R541	1-260-314-11	CARBON	68	5% 1/2W	
R542	1-215-863-11	METAL OXIDE	100	5% 1W	F
R543	1-216-640-11	METAL CHIP	360	0.50% 1/10W	
R544	1-260-085-11	CARBON	68	5% 1/2W	
R545	1-216-683-11	METAL CHIP	22K	0.50% 1/10W	
R546	1-260-288-11	CARBON	0.47	5% 1/2W	
R547	1-216-663-11	METAL CHIP	3.3K	0.50% 1/10W	
R548	1-215-443-00	METAL	8.2K	1% 1/4W	
R549	1-216-675-11	METAL CHIP	10K	0.50% 1/10W	
R550	1-260-288-11	CARBON	0.47	5% 1/2W	
R551	1-216-659-11	METAL CHIP	2.2K	0.50% 1/10W	
R552	1-216-057-00	RES, CHIP	2.2K	5% 1/10W	
R553	1-216-655-11	METAL CHIP	1.5K	0.50% 1/10W	
R554	1-216-675-11	METAL CHIP	10K	0.50% 1/10W	
R555	1-216-065-91	RES, CHIP	4.7K	5% 1/10W	
R556	1-216-674-11	METAL CHIP	9.1K	0.50% 1/10W	
R557	1-218-760-11	METAL CHIP	220K	0.50% 1/10W	
R558	1-216-683-11	METAL CHIP	22K	0.50% 1/10W	
R561	1-216-683-11	METAL CHIP	22K	0.50% 1/10W	
R562	1-249-401-11	CARBON	47	5% 1/4W	F
R563	1-216-662-11	METAL CHIP	3K	0.50% 1/10W	
R564	1-216-697-91	METAL CHIP	82K	0.50% 1/10W	
R565	1-216-671-11	METAL CHIP	6.8K	0.50% 1/10W	
R566	1-260-311-11	CARBON	39	5% 1/2W	
R567	1-216-627-11	METAL CHIP	100	0.50% 1/10W	
R568	1-216-655-11	METAL CHIP	1.5K	0.50% 1/10W	
R571	1-216-381-11	METAL OXIDE	0.22	5% 3W	F
R572	1-216-097-91	RES, CHIP	100K	5% 1/10W	
R573	1-216-097-91	RES, CHIP	100K	5% 1/10W	
R574	1-216-097-91	RES, CHIP	100K	5% 1/10W	
R575	1-216-097-91	RES, CHIP	100K	5% 1/10W	
R576	1-216-097-91	RES, CHIP	100K	5% 1/10W	
R577	1-216-057-00	RES, CHIP	2.2K	5% 1/10W	
R578	1-216-025-91	RES, CHIP	100	5% 1/10W	
R579	1-216-672-11	METAL CHIP	7.5K	0.50% 1/10W	
R580	1-216-073-00	RES, CHIP	10K	5% 1/10W	
R581	1-216-073-00	RES, CHIP	10K	5% 1/10W	
R582	1-216-073-00	RES, CHIP	10K	5% 1/10W	
R583	1-216-677-11	METAL CHIP	12K	0.50% 1/10W	
R584	1-216-081-00	RES, CHIP	22K	5% 1/10W	
R585	1-216-081-00	RES, CHIP	22K	5% 1/10W	
R586	1-216-049-91	RES, CHIP	1K	5% 1/10W	
R587	1-216-049-91	RES, CHIP	1K	5% 1/10W	
R588	1-216-097-91	RES, CHIP	100K	5% 1/10W	
R589	1-216-097-91	RES, CHIP	100K	5% 1/10W	
R590	1-216-675-11	METAL CHIP	10K	0.50% 1/10W	
R591	1-216-675-11	METAL CHIP	10K	0.50% 1/10W	
R594	1-249-437-11	CARBON	47K	5% 1/4W	
R595	1-249-437-11	CARBON	47K	5% 1/4W	
R596	1-216-683-11	METAL CHIP	22K	0.50% 1/10W	
R663	1-215-482-00	METAL	360K	1% 1/4W	
R664	1-215-459-00	METAL	39K	1% 1/4W	
R665	1-216-049-91	RES, CHIP	1K	5% 1/10W	
R667	1-216-041-00	RES, CHIP	470	5% 1/10W	
R669	1-216-671-11	METAL CHIP	6.8K	0.50% 1/10W	
R701	1-249-383-11	CARBON	1.5	5% 1/4W	F
R702	1-216-057-00	RES, CHIP	2.2K	5% 1/10W	
R703	1-216-085-00	RES, CHIP	33K	5% 1/10W	
R704	1-249-383-11	CARBON	1.5	5% 1/4W	F
R705	1-249-385-11	CARBON	2.2	5% 1/4W	
R706	1-216-093-91	RES, CHIP	68K	5% 1/10W	
R707	1-249-421-11	CARBON	2.2K	5% 1/4W	
R708	1-216-073-00	RES, CHIP	10K	5% 1/10W	
R709	1-216-473-11	METAL OXIDE	56	5% 3W	F
R710	1-216-073-00	RES, CHIP	10K	5% 1/10W	
R715	1-216-077-00	RES, CHIP	15K	5% 1/10W	
R719	1-249-383-11	CARBON	1.5	5% 1/4W	F
R720	1-260-292-11	CARBON	1	5% 1/2W	
R721	1-216-667-11	METAL CHIP	4.7K	0.50% 1/10W	
R722	1-216-691-11	METAL CHIP	47K	0.50% 1/10W	
R723	1-216-663-11	METAL CHIP	3.3K	0.50% 1/10W	
R724	1-214-798-21	METAL	1.8	1% 1/2W	
R725	1-214-798-21	METAL	1.8	1% 1/2W	
R726	1-216-675-11	METAL CHIP	10K	0.50% 1/10W	
R727	1-260-292-11	CARBON	1	5% 1/2W	
R728	1-249-381-11	CARBON	1	5% 1/4W	F
R729	1-215-865-11	METAL OXIDE	220	5% 1W	F
R730	1-219-746-11	CARBON	1K	5% 1/2W	
R731	1-216-073-00	RES, CHIP	10K	5% 1/10W	
R732	1-216-073-00	RES, CHIP	10K	5% 1/10W	
R733	1-219-746-11	CARBON	1K	5% 1/2W	
R734	1-215-881-11	METAL OXIDE	15	5% 2W	F
R737	1-249-377-11	CARBON	0.47	5% 1/4W	F
R738	1-249-377-11	CARBON	0.47	5% 1/4W	F
R739	1-249-413-11	CARBON	470	5% 1/4W	F
R741	1-249-430-11	CARBON	12K	5% 1/4W	
R742	1-249-419-11	CARBON	1.5K	5% 1/4W	
R743	1-216-049-91	RES,CHIP	1K	5% 1/10W	
R748	1-216-683-11	METAL CHIP	22K	0.50% 1/10W	
R749	1-216-049-91	RES, CHIP	1K	5% 1/10W	
R750	1-216-057-00	RES, CHIP	2.2K	5% 1/10W	
R751	1-216-065-91	RES, CHIP	4.7K	5% 1/10W	
R752	1-216-083-00	RES, CHIP	27K	5% 1/10W	

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REF.NO.	PART NO.	DESCRIPTION			REMARK
R753	1-219-720-11	METAL	10M	5%	1W
R754	1-219-754-11	CARBON	680K	5%	1/2W
R755	1-219-754-11	CARBON	680K	5%	1/2W
R756	1-220-824-11	CARBON	270K	5%	1/2W
R759	1-218-754-11	METAL CHIP	120K	0.50%	1/10W
R776	1-216-049-91	RES, CHIP	1K	5%	1/10W
R777	1-216-681-11	METAL CHIP	18K	0.50%	1/10W
R778	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R779	1-216-049-91	RES, CHIP	1K	5%	1/10W
R784	1-216-081-00	RES, CHIP	22K	5%	1/10W
R900	1-216-399-00	METAL OXIDE	6.8	5%	3W F
R901	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R902	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R903	1-216-073-00	RES, CHIP	10K	5%	1/10W
R904	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R905	1-216-025-91	RES, CHIP	100	5%	1/10W
R906	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R907	1-216-025-91	RES, CHIP	100	5%	1/10W
R908	1-216-091-00	RES, CHIP	56K	5%	1/10W
R909	1-216-689-11	RES, CHIP	39K	5%	1/10W
R910	1-216-073-00	RES, CHIP	10K	5%	1/10W
R911	1-216-049-91	RES, CHIP	1K	5%	1/10W
R912	1-218-768-11	METAL CHIP	470K	0.50%	1/10W
R913	1-219-748-11	CARBON	4.7K	5%	1/2W
R914	1-219-510-11	CARBON	470K	5%	1/2W
R915	1-249-437-11	CARBON	47K	5%	1/4W
R916	1-249-429-11	CARBON	10K	5%	1/4W
R917	1-216-073-00	RES, CHIP	10K	5%	1/10W
R918	1-216-097-91	RES, CHIP	100K	5%	1/10W
R919	1-216-025-91	RES, CHIP	100	5%	1/10W
R920	1-249-401-11	CARBON	47	5%	1/4W F
R921	1-216-668-11	METAL CHIP	5.1K	0.50%	1/10W
R922	1-216-041-00	RES, CHIP	470	5%	1/10W
R923	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R924	1-249-397-11	CARBON	22	5%	1/4W F
R925	1-216-653-11	METAL CHIP	1.2K	0.50%	1/10W
R926	1-216-653-11	METAL CHIP	1.2K	0.50%	1/10W
R927	1-216-073-00	RES, CHIP	10K	5%	1/10W
R928	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R929	1-216-033-00	RES, CHIP	220	5%	1/10W
R930	1-216-033-00	RES, CHIP	220	5%	1/10W
R933	1-216-683-11	METAL CHIP	22K	0.50%	1/10W
R934	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R937	1-219-727-11	METAL	68	5%	10W
R940	1-249-393-11	CARBON	10	5%	1/4W F
R941	1-216-073-00	RES, CHIP	10K	5%	1/10W
R980	1-216-049-91	RES, CHIP	1K	5%	1/10W
R981	1-216-025-91	RES, CHIP	100	5%	1/10W
R1001	1-216-073-00	RES, CHIP	10K	5%	1/10W
R1003	1-216-049-91	RES, CHIP	1K	5%	1/10W
R1004	1-216-049-91	RES, CHIP	1K	5%	1/10W
R1005	1-216-049-91	RES, CHIP	1K	5%	1/10W
R1006	1-216-049-91	RES, CHIP	1K	5%	1/10W
R1007	1-216-049-91	RES, CHIP	1K	5%	1/10W
R1009	1-216-097-91	RES, CHIP	100K	5%	1/10W
R1011	1-216-073-00	RES, CHIP	10K	5%	1/10W
R1012	1-216-049-91	RES, CHIP	1K	5%	1/10W
R1013	1-216-049-91	RES, CHIP	1K	5%	1/10W
R1014	1-216-049-91	RES, CHIP	1K	5%	1/10W
R1015	1-216-295-91	SHORT	0		
R1016	1-216-049-91	RES, CHIP	1K	5%	1/10W
R1017	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R1020	1-216-049-91	RES, CHIP	1K	5%	1/10W
R1021	1-216-049-91	RES, CHIP	1K	5%	1/10W
R1022	1-216-295-91	SHORT	0		
R1023	1-216-295-91	SHORT	0		
R1024	1-216-295-91	SHORT	0		
R1025	1-249-389-11	CARBON	4.7	5%	1/4W F
R1027	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R1028	1-216-049-91	RES, CHIP	1K	5%	1/10W
R1501	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R1502	1-216-073-00	RES, CHIP	10K	5%	1/10W
R1503	1-216-125-00	RES, CHIP	1.5M	5%	1/10W
R1504	1-216-097-91	RES, CHIP	100K	5%	1/10W
R1513	1-216-049-91	RES, CHIP	1K	5%	1/10W
R1514	1-216-049-91	RES, CHIP	1K	5%	1/10W

<RELAY>

RY501	1-755-137-11	RELAY

<SPARK GAP>

SG701	1-519-422-11	GAP, SPARK
SG702	1-519-422-11	GAP, SPARK
SG901	1-517-499-21	GAP, SPARK

<TRANSFORMER>

T501	1-429-303-21	TRANSFORMER, FERRITE (HDT)
T502	1-416-401-11	COIL, CHOKE 5mH
T503	1-431-413-11	TRANSFORMER, FERRITE (HST)
T504	1-416-257-11	COIL, CHOKE (HCC) 2.0MH
T701	1-431-414-11	TRANSFORMER, FERRITE (DFT)
T901	1-416-402-11	COIL, CHOKE 500μH
T902⚠	X-4035-170-1	TRANSFORMER ASSY, FLYBACK (NX-4142//J1D4)

<THERMISTOR>

TH501	1-807-796-11	THERMISTOR
TH502	1-807-796-11	THERMISTOR

<CRYSTAL>

X001	1-567-781-61	VIBRATOR, CRYSTAL (4MHz)

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REF.NO.	PART NO.	DESCRIPTION			REMARK
*	8-933-278-00	H BOARD, COMPLETE			
		**********			
		<CAPACITOR>			
C805	1-113-340-11	ELECT	47µF	20% 25V	
C811	1-113-340-11	ELECT	47µF	20% 25V	
		<CONNECTOR>			
CN801*	1-564-526-11	PLUG, CONNECTOR 11P			
		<DIODE>			
D810	8-719-064-11	DIODE SPR-325MVW			
D812	8-719-060-26	DIODE SLR-325YCT31			
D813	8-719-060-26	DIODE SLR-325YCT31			
		<TRANSISTOR>			
Q801	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q802	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q803	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q804	8-729-119-78	TRANSISTOR 2SC2785-HFE			
		<RESISTOR>			
R801	1-215-433-00	METAL	3.3K	1% 1/4W	
R802	1-215-409-00	METAL	330	1% 1/4W	
R803	1-215-409-00	METAL	330	1% 1/4W	
R804	1-215-413-00	METAL	470	1% 1/4W	
R805	1-215-413-00	METAL	470	1% 1/4W	
R806	1-215-417-00	METAL	680	1% 1/4W	
R807	1-215-421-00	METAL	1K	1% 1/4W	
R808	1-215-421-00	METAL	1K	1% 1/4W	
R809	1-215-429-00	METAL	2.2K	1% 1/4W	
R810	1-215-433-00	METAL	3.3K	1% 1/4W	
R812	1-247-815-91	CARBON	220	5% 1/4W	
R813	1-247-815-91	CARBON	220	5% 1/4W	
R814	1-249-429-11	CARBON	10K	5% 1/4W	
R815	1-249-429-11	CARBON	10K	5% 1/4W	
R816	1-247-863-91	CARBON	22K	5% 1/4W	
R817	1-247-863-91	CARBON	22K	5% 1/4W	
R818	1-215-445-00	METAL	10K	1% 1/4W	
R819	1-249-441-11	CARBON	100K	5% 1/4W	
R824	1-247-863-91	CARBON	22K	5% 1/4W	
R825	1-247-863-91	CARBON	22K	5% 1/4W	
R826	1-249-408-11	CARBON	180	5% 1/4W	
R827	1-249-407-11	CARBON	150	5% 1/4W	
		<SWITCH>			
S802	1-692-431-21	SWITCH, TACTILE (CONT+)			
S803	1-692-431-21	SWITCH, TACTILE (CONT-)			
S804	1-692-431-21	SWITCH, TACTILE (MENU)			
S805	1-692-431-21	SWITCH, TACTILE (BRT+)			
S806	1-692-431-21	SWITCH, TACTILE (BRT-)			
S807	1-692-431-21	SWITCH, TACTILE (INPUT)			
S808	1-692-431-21	SWITCH, TACTILE (ASC)			
S810	1-692-431-21	SWITCH, TACTILE (RESET)			
		<THERMISTOR>			
TH801	1-807-796-11	THERMISTOR			

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*	8-933-279-00	J BOARD, COMPLETE			
		**********			
		<CONNECTOR>			
CN891*	1-691-961-11	PIN, CONNECTOR (PC BOARD) 2P			
		<SWITCH>			
S891	⚠ 1-571-433-31	SWITCH, PUSH (AC POWER)			

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*	8-933-263-00	L BOARD, COMPLETE			
*	A-1394-929-A	L3 BOARD, COMPLETE			
		**********			
		Note: L complete board and L3 complete board have interchangeability though it is a little different because the material of the circuit board is different.			
		<CAPACITOR>			
C5002	1-126-964-11	ELECT	10µF	20% 50V	
C5003	1-126-933-11	ELECT	100µF	20% 16V	
C5004	1-104-664-11	ELECT	47µF	20% 25V	
C5005	1-104-664-11	ELECT	47µF	20% 25V	
C5008	1-104-664-11	ELECT	47µF	20% 25V	
C5009	1-164-004-11	CERAMIC CHIP	0.1µF	10% 25V	
C5101	1-164-004-11	CERAMIC CHIP	0.1µF	10% 25V	
C5103	1-164-004-11	CERAMIC CHIP	0.1µF	10% 25V	
C5104	1-164-004-11	CERAMIC CHIP	0.1µF	10% 25V	
C5105	1-104-664-11	ELECT	47µF	20% 25V	
C5106	1-164-004-11	CERAMIC CHIP	0.1µF	10% 25V	
C5107	1-130-495-00	FILM	0.1µF	5% 50V	
C5108	1-164-004-11	CERAMIC CHIP	0.1µF	10% 25V	
C5109	1-164-004-11	CERAMIC CHIP	0.1µF	10% 25V	
C5110	1-104-664-11	ELECT	47µF	20% 25V	
C5111	1-130-495-00	FILM	0.1µF	5% 50V	
C5201	1-104-664-11	ELECT	47µF	20% 25V	
C5202	1-104-664-11	ELECT	47µF	20% 25V	
C5203	1-164-004-11	CERAMIC CHIP	0.1µF	10% 25V	
C5204	1-130-495-00	FILM	0.1µF	5% 50V	

L or L3

REF.NO.	PART NO.	DESCRIPTION			REMARK
C5205	1-164-489-11	CERAMIC CHIP 0.22µF	10%	16V	
C5206	1-164-004-11	CERAMIC CHIP 0.1µF	10%	25V	
C5301	1-164-004-11	CERAMIC CHIP 0.1µF	10%	25V	
C5303	1-164-004-11	CERAMIC CHIP 0.1µF	10%	25V	
C5304	1-164-004-11	CERAMIC CHIP 0.1µF	10%	25V	
C5305	1-104-664-11	ELECT 47µF	20%	25V	
C5306	1-164-004-11	CERAMIC CHIP 0.1µF	10%	25V	
C5307	1-130-495-00	FILM 0.1µF	5%	50V	
C5308	1-164-004-11	CERAMIC CHIP 0.1µF	10%	25V	
C5309	1-164-004-11	CERAMIC CHIP 0.1µF	10%	25V	
C5310	1-104-664-11	ELECT 47µF	20%	25V	
C5311	1-130-495-00	FILM 0.1µF	5%	50V	
C5401	1-164-004-11	CERAMIC CHIP 0.1µF	10%	25V	
C5403	1-163-021-91	CERAMIC CHIP 0.01µF	10%	50V	
C5404	1-164-004-11	CERAMIC CHIP 0.1µF	10%	25V	
C5405	1-104-664-11	ELECT 47µF	20%	25V	
C5406	1-164-004-11	CERAMIC CHIP 0.1µF	10%	25V	
C5407	1-130-495-00	FILM 0.1µF	5%	50V	
C5408	1-163-003-11	CERAMIC CHIP 330pF	10%	50V	
C5409	1-164-004-11	CERAMIC CHIP 0.1µF	10%	25V	
C5410	1-104-664-11	ELECT 47µF	20%	25V	
C5412	1-164-004-11	CERAMIC CHIP 0.1µF	10%	25V	
C5501	1-126-934-11	ELECT 220µF	20%	10V	
		<CONNECTOR>			
CN5001	*1-564-512-11	PLUG, CONNECTOR 9P			
CN5002	*1-564-509-11	PLUG, CONNECTOR 6P			
CN5003	1-564-513-11	PLUG, CONNECTOR 10P			
CN5004	*1-564-507-11	PLUG, CONNECTOR 4P			
		<DIODE>			
D5002	8-719-801-78	DIODE 1SS184			
D5101	8-719-800-76	DIODE 1SS226			
D5103	8-719-800-76	DIODE 1SS226			
D5201	8-719-800-76	DIODE 1SS226			
D5301	8-719-800-76	DIODE 1SS226			
D5303	8-719-800-76	DIODE 1SS226			
D5401	8-719-800-76	DIODE 1SS226			
D5403	8-719-800-76	DIODE 1SS226			
D5501	8-719-976-96	ZENER DIODE DTZ4.7C			
		<SENSOR>			
GS50018	-610-154-91	SENSOR UNIT, MAGNETIC MIU-212			
		<IC>			
IC5101	8-759-822-38	IC LA6510			
IC5201	8-759-803-42	IC LA6500-FA			
IC5301	8-759-822-38	IC LA6510			
IC5401	8-759-822-38	IC LA6510			
		<RESISTOR>			
R5001	1-249-383-11	CARBON 1.5	5%	1/4W	F

REF.NO.	PART NO.	DESCRIPTION			REMARK
R5003	1-216-295-91	SHORT 0			
R5005	1-216-689-11	RES,CHIP 39K	5%	1/10W	
R5006	1-216-073-00	RES,CHIP 10K	5%	1/10W	
R5007	1-216-049-91	RES,CHIP 1K	5%	1/10W	
R5008	1-216-295-91	SHORT 0 (L BOARD)			
R5009	1-216-295-91	SHORT 0 (L BOARD)			
R5010	1-216-295-91	SHORT 0			
R5011	1-216-073-00	RES, CHIP 10K	5%	1/10W	
R5012	1-216-295-91	SHORT 0 (L BOARD)			
R5013	1-216-295-91	SHORT 0 (L BOARD)			
R5015	1-216-049-91	RES, CHIP 1K	5%	1/10W	
R5101	1-249-383-11	CARBON 1.5	5%	1/4W	F
R5102	1-249-383-11	CARBON 1.5	5%	1/4W	F
R5108	1-216-308-00	RES, CHIP 4.7	5%	1/10W	
R5109	1-216-308-00	RES, CHIP 4.7	5%	1/10W	
R5110	1-216-073-00	RES, CHIP 10K	5%	1/10W	
R5111	1-216-308-00	RES, CHIP 4.7	5%	1/10W	
R5112	1-249-383-11	CARBON 1.5	5%	1/4W	F
R5113	1-216-073-00	RES, CHIP 10K	5%	1/10W	
R5114	1-249-441-11	CARBON 100K	5%	1/4W	F
R5115	1-215-882-00	METAL OXIDE 22	5%	2W	F
R5116	1-216-073-00	RES, CHIP 10K	5%	1/10W	
R5117	1-216-308-00	RES, CHIP 4.7	5%	1/10W	
R5119	1-216-073-00	RES, CHIP 10K	5%	1/10W	
R5120	1-249-383-11	CARBON 1.5	5%	1/4W	F
R5121	1-249-441-11	CARBON 100K	5%	1/4W	F
R5122	1-215-882-00	METAL OXIDE 22	5%	2W	F
R5201	1-249-383-11	CARBON 1.5	5%	1/4W	F
R5202	1-249-383-11	CARBON 1.5	5%	1/4W	F
R5203	1-249-383-11	CARBON 1.5	5%	1/4W	F
R5204	1-249-441-11	CARBON 100K	5%	1/4W	F
R5205	1-216-073-00	RES,CHIP 10K	5%	1/10W	
R5206	1-215-859-00	METAL OXIDE 22	5%	1W	F
R5207	1-216-073-00	RES, CHIP 10K	5%	1/10W	
R5208	1-216-670-11	METAL CHIP 6.2K	0.50%	1/10W	
R5301	1-249-383-11	CARBON 1.5	5%	1/4W	F
R5302	1-249-383-11	CARBON 1.5	5%	1/4W	F
R5308	1-216-308-00	RES, CHIP 4.7	5%	1/10W	
R5309	1-216-308-00	RES, CHIP 4.7	5%	1/10W	
R5310	1-216-073-00	RES, CHIP 10K	5%	1/10W	
R5311	1-216-308-00	RES, CHIP 4.7	5%	1/10W	
R5312	1-249-383-11	CARBON 1.5	5%	1/4W	F
R5313	1-216-073-00	RES, CHIP 10K	5%	1/10W	
R5314	1-249-441-11	CARBON 100K	5%	1/4W	F
R5315	1-215-882-00	METAL OXIDE 22	5%	2W	F
R5316	1-216-073-00	RES, CHIP 10K	5%	1/10W	
R5317	1-216-308-00	RES, CHIP 4.7	5%	1/10W	
R5319	1-216-073-00	RES, CHIP 10K	5%	1/10W	
R5320	1-249-383-11	CARBON 1.5	5%	1/4W	F
R5321	1-249-441-11	CARBON 100K	5%	1/4W	F
R5322	1-215-882-00	METAL OXIDE 22	5%	2W	F
R5401	1-249-383-11	CARBON 1.5	5%	1/4W	F
R5402	1-249-383-11	CARBON 1.5	5%	1/4W	F
R5406	1-216-689-11	RES, CHIP 39K	5%	1/10W	
R5407	1-216-079-00	RES, CHIP 18K	5%	1/10W	
R5408	1-216-308-00	RES, CHIP 4.7	5%	1/10W	

L or L3

REF.NO.	PART NO.	DESCRIPTION			REMARK
R5409	1-216-308-00	RES, CHIP	4.7	5%	1/10W
R5410	1-216-089-91	RES, CHIP	47K	5%	1/10W
R5411	1-216-308-00	RES, CHIP	4.7	5%	1/10W
R5412	1-249-383-11	CARBON	1.5	5%	1/4W F
R5413	1-216-097-91	RES, CHIP	100K	5%	1/10W
R5414	1-249-441-11	CARBON	100K	5%	1/4W F
R5415	1-215-886-11	METAL OXIDE	100	5%	2W F
R5416	1-216-077-00	RES, CHIP	15K	5%	1/10W
R5417	1-216-308-00	RES, CHIP	4.7	5%	1/10W
R5419	1-216-089-91	RES, CHIP	47K	5%	1/10W
R5420	1-249-383-11	CARBON	1.5	5%	1/4W F
R5421	1-249-441-11	CARBON	100K	5%	1/4W F
R5422	1-215-885-00	METAL OXIDE	68	5%	2W F
R5423	1-216-105-91	RES, CHIP	220K	5%	1/10W
R5501	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R5502	1-216-681-11	METAL CHIP	18K	0.50%	1/10W
R5503	1-216-681-11	METAL CHIP	18K	0.50%	1/10W
R5504	1-216-093-00	RES, CHIP	68K	5%	1/10W
R5505	1-216-067-00	RES, CHIP	5.6K	5%	1/10W
R5506	1-216-670-11	METAL CHIP	6.2K	0.50%	1/10W

GDM-500PS/500PST/500PST9

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Computer Display Dept.

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